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Wizard's wonders at Nuremberg inventors' fair

RHEIN-NECKAR-ZEITUNG

At the 23rd International Inventions and Innovations Fair, which opened recently in Nuremberg all kinds of tricks and gadgets are on show, some of which are causing a great stir, while others are only able to produce the occasional wry smile.

For instance there is an unusual ash-tray which saves the smoker the bother of stubbing out butts and makes burn marks on the table impossible.

For those who like to wear braces, but are ashamed to show them in public there are invisible trouser supports, which allow the sensitive man to remove his jacket in public, should he so wish.

And there is an apparatus the size of a small transistor radio which sends out a call for help if its owner has to "stick 'em up".

This fair will decide whether the roughly 350 new inventions will become part of our everyday life or just end up as curios.

Manufacturers and importers have come from sixteen countries to see the products of mini's genius and weigh up their market potential.

Some of the inventions are gimmicky but others such as Karl-Rudi Müller's

unzipable car window could be very important discoveries.

Great interest has been aroused by those devices which increase automobile safety and Müller's "zip fastener car window" hit the headlines before the fair even started.

This device has already been patented in several countries. Its greatest application is in cases where a vehicle has plunged into a river, or has been so damaged in an accident that it is impossible to open doors or windows and extract victims.

A small handle placed behind the rear-view mirror enables the windshield to be torn out by means of perforations in the rubber surround. Where there is fire hazard this is especially beneficial.

Alfred Grotjahn has struck a blow in the war against crime with his anti-personal alarm. This is strapped to the arm of a person, such as a bank clerk, who runs a grave risk of being attacked.

It can be set for a certain alarm position, so that when a person has to raise his hands, or if he is knocked to the ground, for instance, the alarm is activated. Radio messages are then sent out from it. Several police divisions have been full of praise for this device.

"Comfort without embarrassment" was the slogan of the inventor of the invisible braces.

Now those who prefer to wear braces so as not to have to keep hitching up their trousers, but who consider it a social

stigma to show these garments in public can relax.

The new braces are basically like the old kind, but they are worn underneath the shirt.

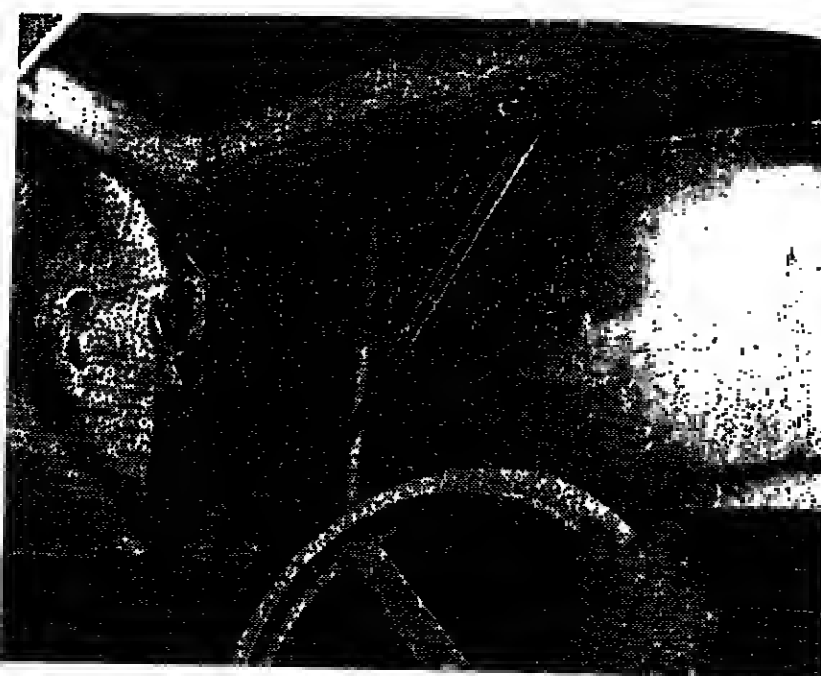
They are not connected directly to the pair of trousers, unlike conventional braces, but are fixed to a plastic ring.

At waist level this ring passes through a convenient buttonhole in the shirt and runs round the wearer's body.

The trousers are connected to this device by means of five hooks.

According to the inventor it takes a mere half hour to put on these braces or change a pair of trousers!

(RHEIN-NECKAR-ZEITUNG, 10 November 1969)



Anti-dazzle fan, one of the many innovations that were shown in Nuremberg (Photo: dpa)

Denis Healey wins his jester's spurs

Denis Winston Healey, the 52-year-old British Defence Minister has been nominated by the Aachen Carnival organising committee the twentieth "Knight of the Crusade Against Dazzle Ears."

He is the second Briton to receive the jester's award. Compatriot, military attorney Dugdale, who was working at Aachen twenty years ago was the first man to receive the "knighthood."

"Sir" Denis will be dubbed at a special meeting on 17 January next year.

(DIE ZEIT, 12 November 1969)

The key in the coat of arms

DIE ZEIT handles facts like stones in a mosaic, patiently, carefully and minutely marshalling individual facts to provide comprehensive background coverage of what goes on.

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The German Tribune

Hamburg, 9 December 1969
Eighty year - No. 400 - by air

A WEEKLY REVIEW OF THE GERMAN PRESS

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Ways and means to more productive relations with Soviet Russia

In signing the non-proliferation treaty the Federal government's main aim is to pave the way for an improvement in relations with Moscow. Yet the government would be standing in its own way were the Federal Republic not to be successfully manoeuvred out of its isolation as an alleged disturber of the peace.

Were Bonn to refuse to sign and ratify the non-proliferation treaty, for instance, all attempts to get into Moscow's good books would be doomed to failure. The Opposition is well aware of this, having itself advocated on opening to the East while in office.

This intention was particularly apparent in Chancellor Kiesinger's policy statement of 13 December 1966, the manifesto of the Grand Coalition, while under the previous administration Foreign Minister Schröder had already set up a trade mission in Poland.

At the highest level of politics the opening-up of a new approach somehow or other inevitably involves the closing of others. This is specially true for a country



Haimut Allardt, Federal Republic ambassador in Moscow signing the Non-proliferation Treaty in the Spiridonov Palace where Konrad Adenauer signed the agreement for the renewal of diplomatic relations with Russia in 1955. (Photo: dpa)

It can only be bridged by a voluntary agreement on frontier safeguards, and unless speculations about European security are to remain so much talk it must be bridged.

At the side of this road the sign reads "Diversion via Moscow." In its reply to the Soviet note the Federal government has proposed that talks on renunciation of the use of force begin soon. Without this country's signature under the non-proliferation treaty these talks would serve no practical purpose.

Renunciation of the use of force leads directly on to the issue of relations between this country and Poland. Bonn has suggested talks at the earliest opportunity to Warsaw too.

The upshot of the Moscow talks will determine the outcome of negotiations in Warsaw. Recent history in Czechoslovakia has made plain for all the world to see what can happen when the mere suspicion arises that someone is trying to circumvent Moscow.

Polish sources are quick to point out that no one in Poland is worried about the continued existence of the Oder-

DER TAGESSPIEGEL

UNABHÄNGIGE WERTUNG DER POLITIK

Neisse frontier. Its recognition by the Federal government would not make Poland's frontier any the more secure. Recognition, it is argued, is of greater significance for Europe as a whole than for Poland, European security being based on the Oder-Neisse frontier as a sine qua non as it is.

In this connection *Polish perspectives*, the official Polish monthly, refers in its November issue to an instruction given by Churchill to Eden on 20 December 1943. In taking over and retelling German territories east of the Oder/Poland, Churchill noted, would be doing Europe a service.

On 1 March 1945 Clement Attlee, Labour leader, addressed Parliament at Westminster. In the course of his speech he noted that in this opinion the criterion of the frontier changes was not that they should relate to the historical past or represent an act of revenge but purely and simply the contribution they made towards a peaceful Europe in the future.

These and similar quotations are used to lend weight to the Polish tenet that the wartime frontier arrangements were intended to be final.

It might help to defuse the Warsaw talks and render them more objective if the tricky frontier issue were viewed not as primarily a bone of contention between this country and Poland but as a factor in European security.

In many quarters in this country a greater degree of openmindedness can be counted on than a few years ago. If the Federal government makes no progress in discussions with the "GDR" everyone fully realises that the attempt has foundered on Walter Ulbricht.

German public opinion has greater hopes of the Warsaw talks and with but a few exceptions the general public is willing to allow the Federal government the greater leeway it will need to meet with success.

(DER TAGESSPIEGEL, 30 November 1969)

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like Germany, divided between East and West in the heart of Europe.

In this situation there are no genuine alternatives between which a choice is possible where vital decisions are concerned. A Bonn government bent on paving the way for a new approach has no choice but to embark on a path beset by barricades and diversions. What matters is the nature of the barricades and diversions that have to be accepted if pitfalls are to be avoided.

In the Bundestag the Opposition has accused the government of effectively barricading a number of paths and making them unfit for future use.

Past arguments against signature of the non-proliferation treaty, including interference with technological progress, discrimination against certain nations and renunciation of the possibility of a unified European state emerging as a nuclear

power, have, by virtue of admirable powers of imagination, been joined by a fresh misgiving.

Signature of the non-proliferation treaty, it is now argued, would deprive Europe of the possibility of developing a

This means of defence, the abolition or limitation of which America and Russia are negotiating in Helsinki, consists of firing anti-missile missiles with nuclear warheads at enemy missiles while still in the air.

The explosion high up in the atmosphere puts the enemy missile out of action but in the process hopelessly pollutes everything underneath. A missile shield could operate over an ocean but what ocean is Europe likely to be able to use as a means of defence?

This is a classic example of an alleged barricaded alternative that like many another is in any case impassable as far as this country is concerned. Others are secondary routes that need not really be taken and others still simply cul-de-sacs. It would be better to see the road sign at the junction and give them a wide berth.

Measured by this yardstick it can readily be admitted in the course of the non-proliferation controversy that this

country is indeed erecting barricades blocking access to a number of possible approaches. Signature of the treaty effectively blocks this country's path to world and European hegemonial power.

Has anyone any objections? Since 1945 there has not been a single responsible politician in the Federal Republic who has advocated either of these goals.

Not even vocal members of the general public have espoused this viewpoint.

Even so the mistrust of old is still alive in the Soviet Union and the Eastern Bloc. Bonn has succeeded in normalising relations with the West but as far as the East is concerned this country remains a shifty customer, not to say downright militarist and revanchist.

The conceivable significance of signature of the non-proliferation treaty is best understood in terms of a first step on the road to a Locarno with the East.

A few after the end of the First World War Stresemann, Briand and Chamberlain drafted the Treaty of Locarno and in autumn 1925 signature by the Reich Chancellor and his Foreign Minister voluntarily set the seal on the Western frontiers dictated by the Treaty of Versailles.

To this day there is a gap to the East.

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DIE ZEIT
WÖCHENTLICHE ZEITUNG FÜR POLITIK, WIRTSCHAFT, KUNST UND LITERATUR

FOREIGN AFFAIRS

Bonn's foreign policy must first convince unconvinced Opposition

Wolfgang Staudt, Minister

Little more than a month after its inauguration the new Federal government's foreign policy has already reached the stage where words must be followed by deeds.

What the government has so far been able to shroud in formulas or leave open must now be decided in the form of talks, negotiations and even notes or agreements.

The most straightforward case in point is signature of the non-proliferation treaty. Much thought attempts may be made by way of official interpretations, commentaries or declarations of reservations to obscure the fact, there is no middle way between signature and non-signature.

Much the same is true of negotiations with Moscow and Warsaw, both accelerated with a will by Bonn via official notes, and one of these days the same will be true of East Berlin.

In every instance a decision as to what is wanted will very soon have to be taken. Indeed the decision ought already to have been reached, otherwise the latest notes and views expressed by Bonn will only have given rise to dangerous illusions.

In the case of the non-proliferation treaty the Federal government has already made up its mind. Even so the Christian Democrats, not to mention the Bavarian Christian Social Union, will continue to fulminate against signature and afterwards against ratification.

In the process the two parties will increasingly manoeuvre themselves into the unpleasant position ex-Chancellor Kiesinger led them into on reevaluation: that of the side that says no regardless of the cost and is neither willing nor able to pay the slightest attention to arguments.

The government and the two coalition parties should nonetheless continue to try everything to convince the Opposition while at the same time no longer allowing themselves to be prevented by an unconditional refusal from acting objectively and reasonably.

In the case of the non-proliferation treaty the Federal government has obviously chosen to adopt this line. As yet the same certainty does not exist as regards the forthcoming talks with Moscow, Warsaw and maybe one day East Berlin.

On these two issues the government is

far less in a position to decide between mere continuation of the existing policy and a fresh start than in the case of the non-proliferation treaty.

That an attempt was made in the government's policy statement to declare both to be reconcilable is forgivable. When all sectors of politics are taken as a whole this might even be possible and the announcement may have appeared credible.

But on policy towards the German Question and the Eastern Bloc this is out of the question. There is no possibility of compromise between any new policy worthy of the name and its predecessor.

This is most evident in relations with Poland and, incidentally, with Czechoslovakia. The Munich Agreement can be declared either null and void now, as Bonn has done so far, or null and void from the word go, as Prague would like to see it. Not even the stoutest counsels on either side will manage to reach an intermediate solution.

There can be no avoiding a clear decision on the Oder-Neisse frontier either. It would be the purest wishful thinking and extremely prejudicial to negotiations with Warsaw were this German side to feel able to evade this issue or postpone it to the distant future. For Poland it remains the crucial test of whether or not the Federal Republic is prepared to initiate a new phase in relations between the two countries.

It is a great deal to ask that Poland be prepared, as it evidently is, to talk about a formula expressing the required state of affairs, the permanence of its present western frontier, in a fashion that the Federal Republic too can accept.

Brandt's idea of suggesting to Warsaw an agreement on renunciation of the use of force in which both sides expressly undertake to respect the territorial integrity and inviolability of the other could be a basis for agreement. Nothing less would do the trick.

It appears extremely doubtful whether the Christian Democrats, let alone the Bavarian Christian Social Union, not to mention the expelled associations, could be induced to countenance some such formula. If they do not, the government must fight. If it is not prepared to fight here and now it would be better not to enter into negotiations with Warsaw at all.

In talks with the Soviet Union this country's relationship with the GDR is the most difficult point. The government's policy statement clearly allowed it

to be a second German state and there was no longer any mention of Bonn representing all Germans. To this extent the way has undoubtedly been paved for a reasonable settlement.

The Federal government must make it even clearer to Moscow than it has done so far, though, that the words as good as represent the deed. On the other hand Opposition spokesmen were quite right in seeing this move as a crucial turning-point in German politics. It is hardly surprising that they are not going to sit back and watch. The Federal government must be prepared. In this instance too nothing less will do the trick.

More indeed is needed but does and must involve give and take between Bonn on the one hand and Moscow and East Berlin on the other.

Hans Gerlach

(Kölnischer Stadt-Anzeiger, 26 November 1969)

America's renunciation applauded

Formal renunciation the United States of bacteriological warfare of any kind and of the first resort to chemical weapons has met with a cordial response.

The possibilities of infecting and annihilating the population of entire continents that have come to light are so appalling that any attempt to limit or preclude them can only be welcome with gratitude and relief.

It comes as a relief to note that the United States must obviously have come to the conclusion that bacteriological weapons are no good as weapons of war.

They affect not only both the man under arms and the civilian population but also both friend and foe alike. The enemy would not need to launch a counter-attack, so there is no need for a deterrent.

As a result stockpiles can and must be destroyed. All that remains is a research potential to study the possibilities of defending the country in the event of a bacteriological attack. Antidotes can only be developed poisons that are known.

It remains to be seen whether the preconditions for total renunciation and the compulsion to do so change. It can only be hoped that they continue for all time to be absolutely deterring.

As regards chemical weapons the United States is going no further than the 1925 Geneva Convention, which the Senate is now, 43 years after the first unsuccessful attempt, to ratify (though US Presidents have so far always felt bound by the terms of the convention).

In other words, stockpiles are to remain. Europe owes it to these stockpiles and not to the Geneva Convention that gas was not used in the Second World War.

The deterrent worked then and the balance of terror should since have in-

The Federal Republic wants a special relationship with the GDR that is not worse but better than the diplomatic relations so often demanded by the East. Bonn is also prepared to accept and even encourage the establishment of diplomatic relations between East Berlin and non-German countries provided — and this is what the East must offer in return — that the GDR plays its part in normalising the frontier with the Federal Republic and safeguarding the existence of West-Berlin on a long-term basis.

Though negotiations on this entire issue will be needed first with Moscow and then with East Berlin, Bonn, it appears, must state its proposals in far greater detail and make them far clearer to the other side than has so far been the case.

Consideration for the Opposition's sensitive spots and outdated clichés must be of secondary importance. A great deal of hard work, trouble and argument lie in wait for the Federal government and ourselves but there can be no avoiding them if new policies are to be pursued.

Hans Gerlach

(Kölnischer Stadt-Anzeiger, 26 November 1969)

increased as far as the terror is concerned. With it, the world being what it is, the reliability of the chemical deterrent will also have increased.

If safeguards are to be increased chemical weapons that "only" induce paralysis must be included in the ban or renunciation with the aim of preventing the possibility of escalation from "harmless" to increasingly harmful gases.

The ban on the manufacture of chemical weapons demanded by the Soviet Union would reduce the deterrent effect, lead to contravention of the agreement by virtue of the impossibility of ensuring that the other side observes it — what is more — put disregard of the terms of the treaty at a premium.

The danger of chemical warfare would thus increase rather than decrease. Terrible it may be but security depends on the deterrent.

(Frankfurter Allgemeine Zeitung für Deutschland, 27 November 1969)

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PROFILE

Hans-Dietrich Genscher a man of the centre

Handelsblatt

He is called the strong man of the Free Democrats, the liberals' prompter, their eminence grise or their chief tactician. He is also referred to as the person who is always there and even the spider in the web.

Hans-Dietrich Genscher, Minister of the Interior in the new Socialist-Liberal coalition, may indeed be all of these things.

These images do indeed catch the essence of his character and influence but they force him too much into the twilight sphere of politics where superfluous threads are spun in secret. Here is the real power even though concealed from outside eyes.

This characterisation of the 42-year-old lawyer, still current today, should have been enlarged upon at least two years ago. Since being elected deputy party leader at the FDP's congress at Freiburg he has represented the liberals and no longer leads them from behind. He became one of their chief representatives and one of their political leaders a long time ago.

This stereotyped judgement may have been provoked by the way Genscher's career has progressed. His advance has been swift, very swift indeed, but it has an undoubtedly solid basis.

Born in Saxony, Genscher studied law in Halle and Leipzig and became a junior court barrister. In 1952 he left his home in the Soviet Zone and resigned from the Liberal Democratic Party and then went to Hamburg, going on to Bremen to join a leading legal firm specialising in tax law.

Four years later he pledged himself wholeheartedly to politics though he was always extremely attentive to his commitments in Bremen.

Genscher began as a scientific assistant of the FDP parliamentary party, becoming its executive secretary three years later. For two years he held concurrently the office of Federal executive secretary.

In 1965 he entered the Bundestag via the candidate list for North Rhine-Westphalia. But by this time he was no longer an unknown outsider but a fixed political entity in Bonn.

As a Bundestag member he has continued over the past four years to attend to the business of the parliamentary party with skill and tact that was far too much for the naturally limited capabilities of such a small parliamentary party as the Liberals.

To his reputation as cunning and wily *apparatchik* and skilful official was soon added the fame of a brilliant parliamentarian. The whole Bundestag listens when Hans-Dietrich Genscher is giving a speech, not because they expect a great political speech — this is still to come — but because everything he says is tactically interesting and politically stalwart.

The man who radiates so much cunning always hits the bull's-eye accurately when he suggests to his listeners that he will consciously forego political mischief and tactical play of all kinds. He has ridden many bitter attacks in this way and has never been hurtful. In direct attacks too argument is his best weapon.

Under these circumstances it is no wonder that many people in the FDP would have preferred to see Genscher continue his work in the parliamentary

party than enter the Cabinet. The party and its members in the Bundestag need a strong hand, especially after the debacle of the Bundestag elections on 28 September.

Genscher himself did not force his way into government. But as only three ministries were available Free Democrats thought that they ought to put forward their best politicians as far as this was possible. Genscher's first love would have been the Ministry of Finance. But his passion for constitutional law and policy helped his entry into the Federal Ministry of the Interior.

Since the FDP, at one time an appendage of the Union parties, has pursued its reorientation many people — especially Christian Democrats — have wondered what Hans-Dietrich Genscher's political position within the FDP was.

He played a decisive part in the overthrow of Ludwig Erhard's government, the change of his party's leader from Erich Mende to Walter Scheel, the liberal vote for Gustav Heinemann in the Presidential elections and the formation of the first government of the Federal Republic to be led by Social Democrats.

He would indignantly lose his temper when people lined him up on the left of the political scheme of left and right — which is false anyhow — and this happened all too often. He places great store on being a man of the centre and at heart he is perhaps even a follower of the old national liberal tradition.

It is not that he will not commit himself, it is not that he would juggle around in the position of someone open to offers from all sides. What the friend of Reinhold Meier and the admirer of Thomas Dehler is doing for the FDP is looking for the political standpoint of a liberal party today.

In the long run it could turn out to be a strong point that he goes about this search more as a staff officer than the commander-in-chief and that he concentrates upon what is immediate, a practical policy more than a great conception that does not completely exclude the luxury of vision.

Maria Stehr

(Handelsblatt, 27 October 1969)

Large number of diplomats to leave their posts

A considerable stir has been caused in Bonn by the announcement of unusually largescale changes in this country's diplomatic service.

Eleven ambassadors, eight consuls general, two ministers and five members of the central organisation in Bonn are affected by the change. They have already been told that they will be placed in temporary retirement in February 1970. None of the diplomats are over 65 but only one is under sixty.

Up to now the Foreign Office in Bonn has named only Ambassador Rudolf Saist of Santiago de Chile, Consul General Klaus Curtius of New York and General Consul Gert Weiz of Sao Paulo, all of whom are resigning voluntarily. The other names are not being disclosed for the time being.

According to the official viewpoint there is a legal pretext for the changes in the diplomatic service in the Civil Servants' Regulations that allows obligatory retirement not only for political motives but also from organisational considerations.



Hans-Dietrich Genscher, Minister of the Interior

(Photo: dpa)

Difficulties in the way of administrative reform

"We will make proposals for administrative reform and the reform of regulations concerned with public services. Administrative reform and reform of public services are to be linked. Reform of professional life will bring productivity more into the foreground, make personnel direction more flexible and personnel decisions clearer."

This announcement of government intentions follows on from many earlier statements and also demands from many sides. Every day citizens of this country feel the direct effects of administrative decisions that are based on the decrees or calculations of administrators. They are waiting with bated breath to see in what way and how far these proposals can be put into practice. They are interested in an efficient administration that not only justifies expenditure made on it but also alleviates the day-to-day lives of citizens instead of making them more difficult as a result of internal friction, idling and individual inadequacy.

But the traditional structure of public administration and its service, profession and planning (as well as an inadequate wage-scale for civil servants) cannot do justice to this task.

Administrators feel that they themselves are the State. An antiquated wage-scale fosters their claim for more respon-

sibility and prestige as compensation. That means that wage increases must in future be adapted to the aims expressed in the government statement. The question can no longer be one of more money for civil servants and employees nor a certain increased percentage for everybody.

Changes in the professional and service regulations must, and shall according to the intention of the new Federal Minister of the Interior, give more efficient officials the chance of receiving material recognition of his industry. But first there will be a general improvement of salaries next year and then details of the reform will be drawn up.

Productivity, a principle that is applied in the economy, shall now receive stronger emphasis after having to exist within strict limits up till now. The opposite principle of seniority has been used in the allocation of posts and in promotion procedure and this custom has only been partially ended up till now. At the same time productivity, derived from Basic Law, has featured in civil servants' regulations. Its implementation and full success meanwhile depend on the details.

These details encumber considerably the work of various project groups in existence for quite some time at the Ministry of the Interior, looking into the reform of administration and public services. Warnings are being made there not to set one's sights too high. Up till now no real help has come from science or industry. In administrative work economic calculations meet almost insurmountable difficulties.

It is just as difficult to find satisfactory yardsticks for judging the work of the civil servants — and a principle of productivity needs these yardsticks. Who will be the judge of the profitability in work towards the reform of the law concerning illegitimate children? How are the performances of two advisers of equal rank and equal qualifications to be compared fairly when the people concerned work in completely different spheres and one attracts attention with an important task allotted to him while the other has to carry out less conspicuous duties?

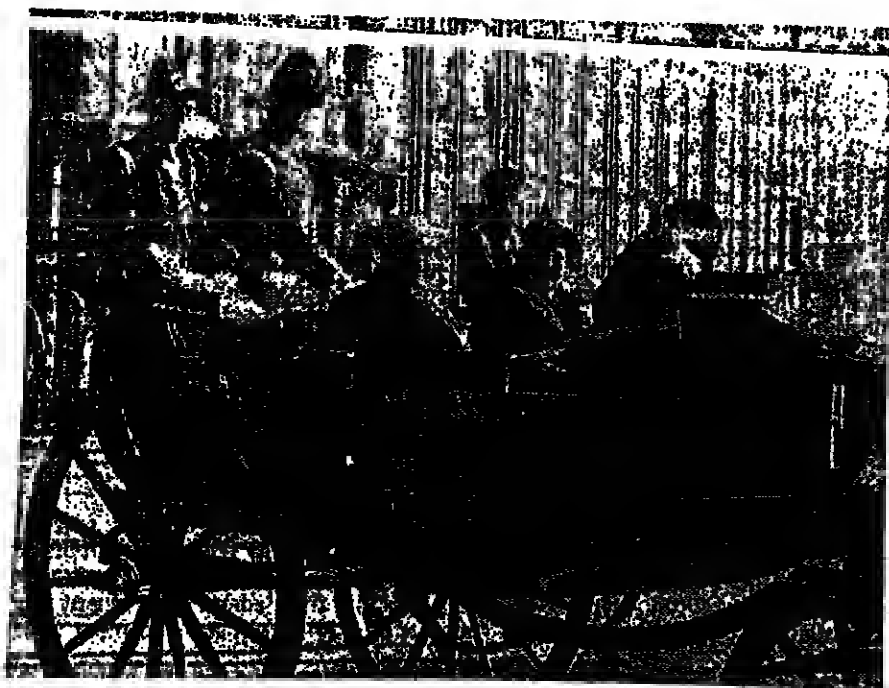
Experts at the Ministry of the Interior are in other respects more optimistic in judging what should be reformed. Public administration, they say, is really much more efficient and capable of carrying out its functions than politicians think. From this can be concluded that obstacles to the implementation of reform proposals are more numerous than the opportunities.

Official departments estimate that the special costs for these changes will be about three million Marks.

It has been stressed that the largescale changes — which will undoubtedly cause suffering for some — were already prepared while Willy Brandt was Foreign Minister. The new Foreign Minister Walter Scheel adopted these plans.

(Frankfurter Neue Presse, 22 November 1969)

(IndustrieKurier, 6 November 1969)



The President in Amsterdam

President Gustav Heinemann made his first state visit to The Netherlands as Queen Juliana's guest. During his four-day stay he laid flowers on the memorial for the many Dutch Jews who were victims of the Nazi occupation of the Low Countries. President Heinemann's visit to Holland is the first a German head of state has made for more than 60 years. The Royal Family, Dutch government and people greeted President Heinemann and his wife with warmth.

(Photo: dpa)

HOME AFFAIRS

Social welfare policy and its inflammable possibilities

The new government in Bonn has inherited a burden of uncertain weight. The contentious question of social welfare policy with regard to worker participation in the economy has not yet been resolved. It may become a stumbling block on the tight-rope which the Social Democrat and Free Democrat government walks. It may be a time bomb in the coalition baggage.

At the Christian Democrats' party conference in Mainz it was stated anew how the CDU/CSU are finding it difficult to get over how quickly the Social Democrat and Free Democrat partnership managed to come to an agreement on a programme. They found this even more difficult to comprehend since on the question of worker participation the two parties take up almost opposite positions.

FDP tries to get a grip

Simultaneous with the efforts of leading members of the FDP to feel their way into top positions in Bonn, even themselves respect and establish in people's minds that the party is fit to govern, bad news has arrived from the provinces.

In the frozen north and deep south of the Federal Republic prospects are none too good for the little, tormented party.

Middle-class conservative members are leaving the liberal ship since they are not willing to accept its new course. They are leaping into the welcoming arms of the CDU or CSU.

Often by the eyes of FDP party members the sight of changing injustices in local constituencies causes despair of ever being nominated for a constituency again.

The spectacular exit of many time-honoured FDP officials and their replacement by young-bloods, particularly in large cities and densely populated areas will change the aspect of the party even further.

The FDP has been undergoing a structural change, which has only been accelerated by the decision to link forces with the SPD in a Bonn government. This change is now in full swing and it will undoubtedly involve more pessimistic reports from far-flung places.

The CDU/CSU will play on this, hoping to drive every last conservative voter from the Free Democrats. The liberals can do nothing more to halt this process.

They must attempt to live through it by adopting the right attitudes in Bonn. The first dim ray of hope came from the local elections in North Rhine-Westphalia. For the first time the swing was slightly in favour of the party, in comparison with the general elections.

The liberals should not bewail the loss of the seven Bavarian renegades too much since they will be easy to replace with fresh young men. Anyone who joins the CSU at the moment is not to be envied.

The situation in Schleswig-Holstein is trickier. The leader of the state government fired the state chairman of the FDP from the Schleswig-Holstein cabinet and the party has not as yet said anything.

The party is fearful for both its remaining government members in the provincial assembly as well as one cabinet minister and one secretary of state.

In Schleswig-Holstein the party must be rebuilt with as many new faces as possible. There would still be time before the provincial assembly elections in 1971.

(Frankfurter Rundschau, 27 November 1969)

The SPD showed flexibility and enforced no conditions on the FDP, which had stated their position firmly and clearly. The Social Democrats found this all the easier since the committee of experts which had been established by the SPD at the time of the Grand Coalition has not yet put forward its report on the extension of worker participation and its consequences for the economy. So in practice the SPD had nothing to surrender.

The CDU/CSU had also underestimated the capability of the SPD to come to terms with the demands of the Federal Republic Confederation of Trade Unions. The unions had demanded before the general election that there should be an extension of equal worker participation and they made this their most pressing demand on the government. The demand for worker participation is also a part of the basic programme of the Confederation of Federal Republic Trade Unions (DGB).

So it is not with a light heart that the unions have taken up a position with regard to the unusual political situation in Bonn, but only with "palpitations". But a majority of them has finally accepted the desirability of a government led by the Social Democrats and if necessary a Socialist-Liberal coalition, and they have given this precedence over the completion of their demands for worker participation.

The unions are hoping that this government will provide an on-the-whole more progressive social welfare policy and a more active economic policy. The "small coalition" should not be reproached with this. The most important employee demands concern job security and price stability. The unions know this and they have taken it into consideration in opting for the present coalition.

According to the formulators of Basic Law and the judges in Karlsruhe who defend and uphold it the Bundestag's duty is "to be the organisation in the Federal Republic which protects the interests of the nation as a whole and at the same time makes manifest the political interests of the Federal states as members of the Federation."

This is the yardstick by which the Bundestag (Upper Chamber) of this country's parliament should be measured. And as the Bundestag includes members of state governments this yardstick must also be applied to senior officials in the Federal states.

If the results of these measurements are encouraging it must come as a surprise if the self-critical voices issuing from the states are taken into consideration.

Franz Josef Röder had his reasons when he warned against "bad style" in the Bundestag, immediately after his election to its Presidency. He said it would be bad style if individual states persistently stood up and fought for their own interests in the Bundestag.

From a distance there is a sound like thunder from Lower Saxony, where the state Finance Minister, Alfred Kubel, came into conflict with the Bundestag on account of its attitude towards the nation.

Kubel, who has become the SPD's chief contender for the position of Prime Minister in Hanover, described constitutional realities in the relationship between the Bundestag and the nation as "separatist federalism".

Such a harsh criticism of provincial selfishness is only justified when basic

At any rate the DGB denies that it has come to a stagnation agreement with the SPD on the question of worker participation. DGB leader Heinz-Oskar Vetter has sought to supplement this by saying that the unions will take on the role of an extra-parliamentary opposition if a cleft should open between government policy and the unions' attitude.

A confrontation of unions and SPD is therefore quite possible in the future just as much as it was in the past. It is only necessary to bring to mind the discussions on the emergency powers legislation. The SPD knows that it is governing at the risk of running up against such a conflict. The only reminder of this they need is the DGB's attack on Economic Affairs Minister Karl Schiller when he spoke of the necessity of pegging wages and salaries.

But on closer consideration what at first appears to be a problem for Willy Brandt's government turns out to be just as great a problem for the DGB itself. In the DGB ranks there are many officials who are not content with the attitude the organisation is adopting and above all, of course, those members who belong to the CDU and are now hoping that they can cause a split between SPD and DGB.

Nevertheless action in the Bundestag by the left-wing of the CDU/CSU on the question of worker participation is not very likely at the moment. On the one hand there is the suspicion that in so doing they would not so much be undertaking a party-political strategy in its purest sense as preserving the good relationship between the DGB leadership and the new government.

On the other hand it is unlikely that the CDU can quite and carry through such a manoeuvre. Party leader Rainer Barzel's "no" to the unions' plans for

Reorganising Federal States and their duties

problems in the relationship of one state to another or to the nation as a whole are dealt with in a separatist manner.

Many examples of the states' willingness to operate "cooperative federalism" could be quoted. Nevertheless the conflict contained in these complaints is still unsolved in principle, even though it has long since become anachronistic.

Even the watching eyes that once trained on the Bavarian state government's relationship with the central government and the nation as a whole no longer see "the former federalistic accent of territorial separation".

Professor Günter Düring of Tübingen University has noted that the formulators of Basic Law arranged the subdivision of the Federal Republic into federated states with the special protective measure of "perpetuated decisions". (Article 79, section 3 of Basic Law.)

If the principle of the federated state is to be subordinated to the two other principles of Basic Law, democracy and a nation of social justice, then the states and above all their governments cannot set themselves up in opposition to the need for basic similarities in each state and reasonable cooperation with the central government.

Professor Konrad Hesse of Freiburg has called this development "essential unifying" of the federated state.

worker participation at the party conference in Mainz should have taken the sting out of all speculation and should bring back all party members given over to illusions to the realities expressed in the Berlin Programme.

If the CDU had wanted an extension of proportional worker participation it would have been able to achieve this in conjunction with the SPD during the term of office of the Grand Coalition. But the majority of Christian Democrats did not want this. Now that the party is filling the Opposition benches and has to collect itself together and rejuvenate itself it can afford internal strife on the question of worker participation less than ever.

For in the previous Bundestag no majority could be found on worker participation when the SPD was still keenly demanding it. Now the Social Democrats have to take into consideration their new coalition partners, the FDP, so there is still not a majority.

SPD members of the Bundestag, even those who have a union card in their pocket — 200 of the 518 Bundestag members are card-carrying union members — are not going to risk jeopardising their party's newly won power in order to press on with demands for worker participation. This is especially so since the SPD/FDP coalition has announced improvements to labour laws such as the CDU/CSU have pressed for in the past.

These are of great interest to many individual unions whose field of concern for structural reasons or for reasons of company size makes equal worker participation based on the example of the systems in the iron, coal and steel industries out of the question.

It can be seen that the situation calls for two ways for the unions. The extent to which the government can fulfil other urgent union requests, for example the substantial improvement to accumulation of wealth for employees, will determine whether the time bomb of worker participation in the government baggage can be defused or not.

Hans Jörg Soltorf
STUTTGARTER ZEITUNG,
25 November 1969

It involves the ruling dictated by political realities, by which the federated states have to subordinate their own interests in cases where they have organised their cooperation in the "confederation of states" manner, on the principle of common consent. This is achieved as a result of conferences between the Prime Ministers and Cabinet ministers responsible for the themes under discussion.

They act in the "federated state" manner in the Bundestag which works on the formulation of Federal Republic law by means of majority decisions.

The conflict between "cooperative" and "separatist" federalism can not be overcome at length by day-to-day rational political practice.

Structural improvements are unavoidable.

Röder has warned the states that they should not group themselves in the Bundestag into rich cousins and poor cousins, as they did during finance policy reform, and in the same breath he spoke in favour of a re-grouping of the Federal Republic into operable states.

A little later Minister of the Interior Hans-Dietrich Genscher announced that the government would risk making a move towards a reasonable and justifiable marking off of the jurisdiction of federal states and the central government.

Both the realignment and the apportioning of duties to the central government, the federal states and local governments could not be postponed any longer if federalism in this country was to stand a chance.

Wolfgang Hertz-Eichenrode
(DIE WELT, 25 November 1969)

INTER GERMAN RELATIONS

Klaus Schütz - pacemaker in West Berlin

UNDER FIRE FROM ALL SIDES FOR HIS ADVANCED VIEWS

Kölner Stadt-Anzeiger

Officials of expellee organisations would have liked nothing more than to tear him limb from limb. In *Neues Deutschland*, the newspaper of the Socialist Unity Party (SED), a certain M.A. said that he was on an adventurer's course.

So under heavy fire from both right and left Klaus Schütz, the governing Mayor of West Berlin, continues on his way as pacemaker.

From time to time his path is lost in the dark corridors of secret diplomacy but he always emerges once again, always coming up with something surprising. In the efforts of the Western part of Germany to reduce tension with the East step by step the governing Mayor is always one step ahead of those governing in Bonn.

Schütz drew upon himself the anger of the expellee leaders during his visit to Poland this summer when he announced the plainly foregone conclusion that the Oder-Neisse frontier between Poland and Germany is a reality that must be recognised.

It is unthinkable that this experienced politician first came to this conclusion when visiting Poland. And it is just as unthinkable that his political friends in Bonn have not come to this conclusion now because they have not yet been on a trip to Poland.

Schütz the pacemaker took it upon himself on the Polish visit to say what the real situation is, a situation that can no longer be changed by peaceful methods. He thought the step forward would be beneficial and those whom Schütz preceded could not complain about the result of the elections on 28 September.

The most recent raps that Schütz has had to suffer from East Berlin once again result from his pacemaking. For even before Foreign Minister Walter Scheel had asked the recognition of West Berlin by the German Democratic Republic with the final abolition of the Hallstein Doctrine Schütz had already set it out for all to see.

Most people advocate talks with the GDR

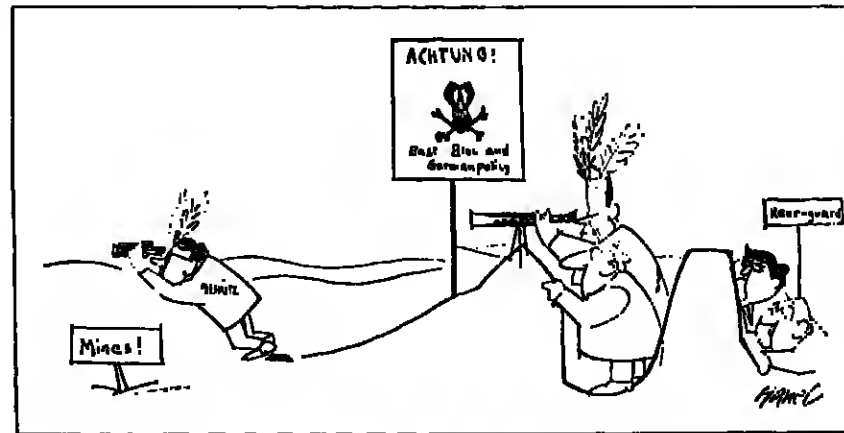
Seventy-four per cent of the population of the Federal Republic believe that the Federal government should have political talks with the government of the German Democratic Republic.

The results of a survey by the Bonn Institute for Applied Sociology (INFAS) show that only eleven per cent reject talks of this nature.

The survey also showed that more than half the citizens of this country (52 per cent) expect positive results from the Eastern policy pursued by the SPD-FDP government. Twenty-six per cent are apprehensive.

The course of the Federal government in its Western policy is seen less clearly by the public. Forty-seven per cent expect the Federal government to pursue new courses while 28 per cent reckon on a continuation of the old Eastern policy.

(Süddeutsche Zeitung, 18 November 1969)



In front of the front-line!

(Cartoon: Hanel/Volkwein)

When East Berlin demanded unambiguously that West Berlin's Senate should free itself from Bonn's policy before the Eastern side would enter into discussions with it, the governing Mayor declined, with nuance it is true, but still equally unambiguously.

Admittedly West Berlin has a special status, admittedly it is not a Federal state of the Federal Republic. But in spite of this West Berlin is firmly connected with the economic, financial and legal system of the Federal government. Taking as a starting point that there are two German states within one nation, this could only mean that "West Berlin belongs to free Germany". West Berlin will always remain within the framework of the Federal government's peace policy.

Recently Klaus Schütz has not tired of explaining the status of the city in this

Ulbricht's regime still demands all or nothing at all

forget past attacks by the SED on the Social Democrats. They are now correctly calling the party the SPD and not, as previously, the disparaging SP. But people in the GDR cannot be convinced so easily that the attitude of their party and state leadership towards Bonn has really changed.

A courteous note has been introduced and this is reflected in all the official statements being made at present on Willy Brandt's policy statement. East Berlin no longer talks of West Germany or the West German Federal Republic but the Federal Republic of Germany or uses the abbreviation BRD. Even Helmut Schmidt, the first member of the government to get into East Berlin's line of fire, is called, in contrast to his predecessors, Minister of Defence and not Minister of War.

But apart from this little has actually changed in the SED's position towards the Federal Republic and the SPD/FDP government in particular.

Nothing else could have been expected after SED head Walter Ulbricht consolidated his "all or nothing" position in the German question not long after the Federal elections and at the same time demanded that the new Federal government should recognise realities. Those in power in the GDR are not satisfied with what the Socialist-Liberal coalition has done so far, that is no more than take

of the situation. That is indeed no pleasant state of affairs and it is obvious that in the forthcoming discussions on detente the position of West Berlin must be secured and not ignored.

The catchword has already been given — reality. And Klaus Schütz has said it so often that he deserves not only angry responses but also scorn. The Oder-Neisse frontier is a reality, the GDR is a reality — West Berlin is one too. The reality of the Oder-Neisse line should be recognised (by us). The reality of the GDR should be recognised (by us). The reality of West Berlin should be recognised — (by you).

When Schütz was in Poland he was able to achieve the first success of his policy of reality. Warsaw forewent the chance of greeting Schütz as head of the independent political unit of West Berlin and received him as the German politician Klaus Schütz. The gesture was clear and it was noted in East Berlin without any jubilation.

The chance of achieving a secure city in a peaceful Europe is so unique that only the malicious would thwart it. There are many signs that sensible estimates are made of it — apart from in East Berlin.

More appears that the mere conciliatory relationship that Klaus Schütz showed so clearly to the Russian ambassador to East Berlin, Pyotr Abrassimov, there are realities, at all modest, that hint at West Berlin's role as a place for East and West to meet. In September Czechoslovakia made use of the shop-window of West Berlin by exhibiting its exports. Rumania recently did the same and at the end of this month it will be Poland's turn. Moscow's Bolshoi Ballet has just made a triumphal appearance in the Deutschlandhalle and the GDR exhibited its books in the Europa Centre.

West Berlin does not want to be a nuisance-maker and must not act in this role unless politicians in its hinterland do not give it any peace.

Dietrich Fritzen

(Kölner Stadt-Anzeiger, 18 November 1969)

note of the existence of the GDR as a state with many ifs and buts.

Those responsible in East Berlin demand much more of Bonn who should recognise the "Socialist German state" in international law and thus practically as foreign territory. "The Federal Republic has established itself as a separate imperialist state and the German Democratic Republic has developed into the Socialist state of the German nation. Germany within the frontiers of 1937 now exists only in the weather reports of the Federal Republic."

For the time being all attempts by the new Federal government to ease and normalise relations between the two parts of Germany are doomed to failure, whether people accept this or not.

There seems to be no way out of this situation — but when has this not been the case in Germany since 1945? Nothing would be more wrong than to move East Berlin to become more reasonable by making new concessions all the time.

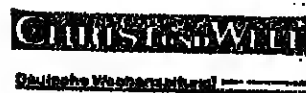
It became painfully obvious to the Grand Coalition of Christian and Social Democrats that measures of this type has as little effect in politics as in economics. The SED leadership reacted in its own way to the willingness of the Kiesinger-Brandt government to oblige. It raised its demands on the Federal Republic higher still without itself foregoing the smallest part of its "all or nothing" policy.

But this unfortunately seems to have been forgotten already by those politicians who confuse patience and perseverance in the German question with immobility and try to encourage the new Federal government to make new initiatives towards East Berlin.

Henning Frank

(CHRIST UND WELT, 21 November 1969)

MUSIC

Early Hindemith work
at Darmstadt

"We protest against this moral dissolution of the theatre. Our statesmen speak so much about moral renovation. Churchmen of all denominations are making an effort to fix ethical concepts eroded by the war. But the achievements of their serious, painstaking work are demolished frivolously and wantonly by a theatre that is financed by public taxes."

This appeared in a Stuttgart newspaper, *Volksblatt*, on 7 June 1921 after an evening of premieres of one-act works by the 26-year-old Paul Hindemith had degenerated into scandal.

Articles of this type must be read today to understand the indignation that theatrical affairs could arouse at that time — imagine a theatre touching upon the work of statesmen today — and to measure the distance between us today and the events of yesteryear.

Today we are amused with the court officials in the one-act *Nusch-Nuschi* when the Burmese Emperor is told by the haughty general who is said to have breakfasted with four of the Emperor's best wives can no longer be carried out as it is no longer necessary — the general is already emasculated.

Today we can laugh — in contrast to those court officials in the theatre — because we have already seen him: the four women had fallen into the hands of a playboy. It remains dubious if this is a cause for moral indignation. When Hindemith enlivened upon the disloyalty by quoting Mark from Wagner's *Tristan* it increases the value of the score for our ears and nobody is outraged.

The theatre in Darmstadt specialises in resurrecting works. But his great operatic festival left a bitter taste. People came from all around to find out the influences on Hindemith's first operatic works. Nobody would have believed that his early work was redolent of Strauss' sugary sweetness with strains of Puccini's colour and wild Wagnerian chromatic passages. Even those who were there in 1921 are now surprised that the music was ever considered new.

It is as traditional as everything that Hindemith wrote later. The only thing that now attracts us to Hindemith is the short period of his middle works, his chamber music, some orchestral works and the first version of *Cardillac*.

Perhaps this judgement is false. It could be that in a further fifty years Hindemith will be celebrated as the greatest German musician of the twentieth century, only providing that this century does not intend to alter radically from the nineteenth and as time wears on this seems less and less the case.

But the libretti too no longer appeal to a modern audience. Kokoschka's script on the eternal problem of man and woman is intolerable and indulges in foggy symbolism. He and she look for

each other, kill each other while snivel, that is fully normal human intercourse takes place beneath the level of the two mutual murderers. Frenz Blei's puppet story provides variations, both Expressionistic and comic, on the Freudian after-effects of *Nusch-Nuschi*.

Hindemith has not only tormented the whole orchestra with his chromatics but also saw to it that music would condemn the opera or musical theatre to death as the text — fortunately — could not be understood and voices scarcely heard. As the audience is numbed by sound the only judgement it can come to is the most annihilating of all — it is boring.

Striking details, relaxed passages for wind and enunciation of the drums are of little or no use. These works belong in the archives and are interesting only as opera history.

But the Darmstadt Landestheater has at least managed to wipe the dust off the remote operatic files so that no loss will be made. Harro Dick's production with the decor of Michael Goden is sensitive and perceptive, features are stylised and the singers are perfect puppets. Their costumes swing around their legs and their arms are lengthened so that the audience could well believe that it is indeed puppets that are playing before it. To see this together with Aljute Mezzie's enchanting costumes for *Nusch-Nuschi* was an aesthetic pleasure.

Once again Hans Drewanz showed his precision in intricate stylistic questions and the temperment with which he can conduct.

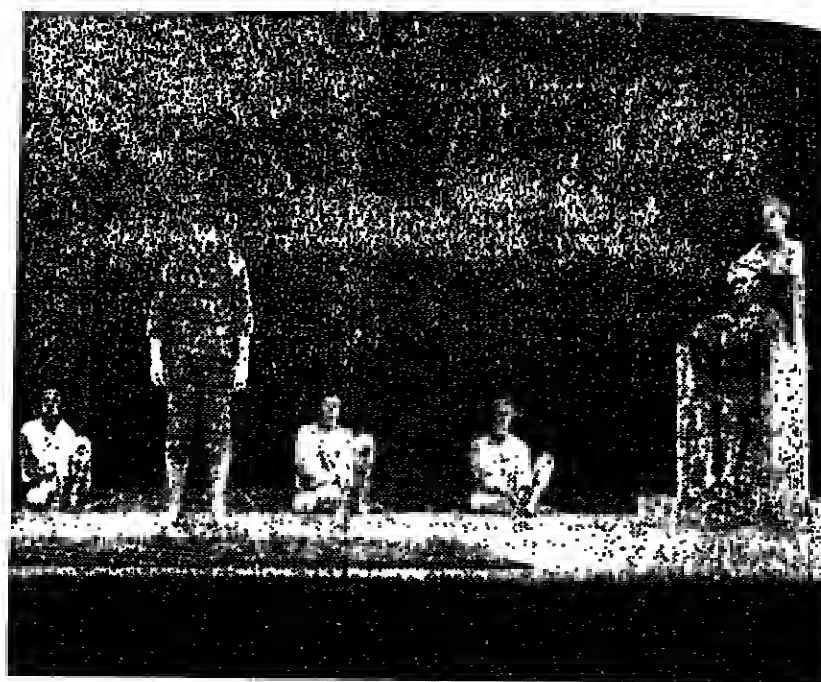
The vocal side of the ensemble at Darmstadt is not so good as it could be but that is another problem that had to be accepted and can only be excused by the fact that the else at Darmstadt is makeshift. The new theatre will be ready in 1972 and will present different demands especially as Darmstadt, in spite of its modern tradition, has planned its new theatre as conventionally and superdimensionally as all other theatres in the Federal Republic. The eavesdropping principle is still applied. The last chance for a truly new theatre has been wasted. And then there will no longer be trial opera evenings that are so necessary, like this one for Hindemith.

(CHRIST UND WELT, 21 November 1969)



A scene from Hindemith's 'Nusch-Nuschi'

(Photo: Pit Ludwig)



A scene from 'A Man from Rabinal'

(Photo: Günter Engler)

Heathen ritual in Frankfurt

The large Maya death drum resounds. A captured prisoner lives and plays his final hour, re-enacting his life and struggles. He is driven by the victors to the place of sacrifice where his heart is torn from his breast.

A dance of death full of strange symbols, signs and images. This sort of ritual was still known to the Mayas of Guatemala in the fifteenth century before the Spanish arrived. The *Man of Rabinal* has been handed down as a record of their ceremonies. Hofmannsthal dealt with it and the new translation by Erwin Walter Palm, on which the Frankfurt production is based, has been transformed from an ethnic find into a work of literature. Its archaic formulae show the distance between two cultures but also their closeness in what must be termed existential experiences — the experience of the end of existence, the experience of the transition from life to death.

The strangeness of the text is not lost even when one gets used to it. But is this the sort of text for the contemporary theatre? The production does not give a conclusive answer to this question. In spite of the many explanatory passages in the programme the premiere was a remote, probably not understood, obscure event for the audience.

Hans-Joachim Heyse's production gives clear insight into what the play could mean to us. We are acquainted with

the reality and psychology of the situation of the prisoner surrounded by victors and his farewell to earth and sky before his last attempt to meet the scorn of his enemies.

But these scenes are time and time again swamped by resonant metaphors that never make themselves completely plain, by the rigidity of a language that persists in monotonous gestures and the ceremony of laborious articulation.

On top of this Heyse's production only makes the continual transition between the reality of the ceremony and the reality of a slow death in which it ends, by coarse and fitful changes of direction.

The performance bears witness to the exertion required to keep up ecstasy. In the elevated expression of the ritual it wants more than clearness. Over long passages it becomes a monstrous roar and, for the actors, a struggle to bring the slow sentences to a tempo that they resist.

This causes unnaturalness of style that actors like Günther Amberg, Hansgeorg Laubenthal and Olaf Biso are inclined to anyway. And this finally results in the ever more prevalent impression that a procedure that resists the theatre is being forced by hook and by crook to fit the stage.

The unnatural style of the performer finds its counterpart in the hopelessly artificial choreography that José Gómez drew up for the twelve yellow jaguars, silent figures in the ritual. They squat or hop around in their judo-like robes, form

patterned groups and then scatter once again from these patterned groups and then scatter once again from these groups. The stage, empty apart from a Maya frieze hanging above it, allowed them enough room for this. The Mexican Antonio Lopez Mancera is responsible for decor.

The embarrassing thing was that it can be felt that the Frankfurt theatre people and their Latin American friends are bringing forth their ideas of a modernity that is of yesteryear. Or is it Mexican?

Because of this the alien Guatemalan evening, an event that will go down in the annals as a curiosity, was also alienating.

The performance did not manage to rise above the philological and historical interest that may give it the air of a piece of ethnography. But only this could have justified it. It is now a ghost from Central America.

Peter Iden
(STUTTGARTER ZEITUNG,
18 November 1969)

THINGS SEEN

Leverkusen exhibition of conceptual art

IS IT A SWINDLE OR NOT A SWINDLE?

Hannoversche Allgemeine
Zeitung

If a visitor ventured into the Leverkusen Municipal Museum and Art Gallery at Morsbroich Castle in the course of the next few weeks, he might think he had entered a technician's office by mistake.

On the walls there are graphs, a market report, plans and photographs. On the floor is a white rectangle with a spirit level placed on it and on another spot there is a triangle with a compass affixed to it.

In one corner there are black angles whose area decreases towards the top. As well as all this there is a table, covered with document files, which when open are seen to contain more texts, photographs and figures.

Visitors to the museum are invited to ask themselves: "Pardon me, how do I get to the museum?" At this the attendant replies friendly: "You are in the midst of the exhibition 'Konzeption — conception' sir, and furthermore in the museum!"

"Minimal art" is the follow-up to the bright sorcery of the Pop wave. It has reduced the image received to a minimum. One sees discs, base plates and rods. The essential point is that one sees them.

Works of conceptual art, the latest brain-child of the avantgarde, do not need to be on hand at all. "Ideas alone can be art," Sol Lewitt reassures us.

Timm Uriehs bangs the drum even louder: "My opinions and ideas are art. My words, I am a poet," he claims.

We are prepared to immerse ourselves in art which is not there. Flicking through the files on display we come across Donald Burgis.

He describes a walk he took on the afternoon of 4 September 1968 in the neighbourhood of his home town, Bradford.

On this walk he discovered a "stone". He decided to do a study on this from its optical, mathematical and geological properties. The result of this study is shown in graphs, analyses and photographs — the "stone" in far off Massachusetts has become an objet d'art.

In this respect conceptual art overlaps with land art which has been on many lips for some time. The land artist paces off some tract of land somewhere and lays out ditches or walls. Richard Long ploughed the garden of Haus Lange in Krefeld into hills and dales.

Since most objects of land art lie in some far off place they must be transferred to art galleries and exhibitions in the form of photographs and descriptive pieces.

Conceptual art does away with a specific point of departure and contents itself with plans and designs. It does not necessarily entail what is on hand, but can just be an object which is possible.

It describes events and occurrences and as such is something approaching the "happening".

What it can not do without is photography as a means of visual aid. Amatt buried himself in sand until only his head was sticking out. The result of this



Amatt's 'An Invisible Hole'

(Photo: Katalog)

experiment is contained in a strip of photographs.

Dibetts took photographs of surfaces at ten minute intervals. The changing shadows show the passage of the sun.

Baldessari has taken photographs of objects with some, any, spectator pointing at them.

But there is also a kind of conceptual art which is independent of the camera. Some exhibitors simply sent a letter. Sandback made "eight suggestions" on how the large hall of Morsbroich castle was to be variegated on the basis of certain chemical volumes.

Hanna Darboven calculates and constructs out of dates and their aggregate digits.

Shakespeare's early comedy "Love's Labour's Lost" is very rarely performed. It is said by experts to date from the year 1592 or thereabouts.

The play is now being presented by Munich's Kammerspiel.

The construction of this play is a complicated weave of thoughts and ideas. It offers scope for good acting, but is rather lacking in action.

Bravely, manfully swears oaths make it good material for those who want to undertake intensive philosophical studies of all kinds of terrestrial joys.

Most of these oaths are of a strangely feminine nature. They are not kept. The pitiful breaking of these oaths comes the first time there is an opportunity for feminine seductive conditions.

Perhaps all this does give an opportunity for the audience at the Munich Kammerspiel to gain true enlightenment and profit from what they see, even those members of the audience who consider themselves to be enlightened in such matters.

This is not necessarily so, as the date of writing of the play indicates. There is a succession of pitfalls into which the young William Shakespeare allows his rather pale and anaemic characters fall.

This is not necessarily so as the very paleness of the characters goes to show; the women who try hard to be impressive and to shine by being witty and who come out of it dull and shallow and far from creating a sense of gaiety remain rather unimpressive.

'Love's Labour's Lost'
in Munich

This production of the Bard's play lasts for two and a half hours. But the comedy never really comes to life.

Paul Verhoeven has put a lot of hard work and keenness into his production. But he seems to have taken Shakespeare literally and has proved that the labour of love is lost and the play is no masterpiece.

The fact that ambitious philologists may praise the closeness to Shakespeare's poems and sonnets cannot change this.

Even the mixture of two translations, one by Jakob Michael Reinhold Lenz and the other by Wolfgang Count Budissin which has given rise to a fine production in the past (albeit in the time of Ivan Nagels) could not come to the rescue in Munich.

The play is dependent upon the words rather than actions. It is a battle of wits artfully created using in a rather long-winded fashion every opportunity for diverse forms of verse. This is almost schematically permeated with prose scenes from the subsidiary action.

Paul Verhoeven tackled this play using every ounce of consideration and contemplation in his disposal.

In all honesty this was an attempt to please the senses with complicated

produced as a guide to the exhibition virtually is the exhibition.

This catalogue has been compiled by Rolf Wedewer and Kourad Fischer and is published in Cologne at a cost of 10 Marks. It contains the brain-children of 45 artists, of which about a half are Americans. Next in line come the English, Italians and people from the Federal Republic.

Needless to say conceptual art lends itself to the practical joker and often approaches the quiz or the charade or aerostic in form. Some conceptualists pass themselves off as mystics!

Is the whole thing just a racket? This remains an open question, since it is very difficult to bring concepts home to the average art consumer, who wants something more concrete.

Anna Klapheck

(Hannoversche Allgemeine, 14 November 1969)

Jubilee drama
next summer at
Bad Hersfeld

Bad Hersfeld's twentieth drama festival will take place between 2 July and 2 August 1970 and will again be under the general artistic direction of Professor Ulrich Erfurth.

It will be the jubilee festival. The management has announced that Günther Fleckstein of the Deutsches Theater in Göttingen will stage Peter Hacks' *Amphitryon* with Gerlinde Loeker in the role of Alcmena. Negotiations are continuing to sign up Goetz George for the title role.

Reinhard Olszewsky from Buenos Aires will stage William Shakespeare's *Richard III* with Hans Korte as Richard. Erfurth himself will put on Bert Brecht's *Heilige Johanna der Schlachthofe* (St. Joan of the Stockyards) with Nicole Heeslers as the lead.

There will probably be further performances of Erfurth's staging of Friedrich Schiller's *Die Rauber* (The Robbers) starring Hannelore Schröth and Hannsgeorg Laubenthal.

(STUTTGARTER ZEITUNG,
13 November 1969)

thought processes, but this overall effect was not to create enthusiasm in the audience. It led to boredom.

On way to avoid this, one supposes, would have been to turn it into pacy playacting with a fair measure of farce. Verhoeven sought to make his name in the opposite direction. He tried to expand the enjoyment of a text which is scarcely enjoyable.

In the end the director and the cast alike seem to have lost all sense of self-criticism.

What remains from this unsuccessful effort is Jörg Zimmermann's inspired stage sets, a dreamlike park created by projection with a castle in the foreground or background. He has had the clever idea of putting across the idea of the size of the park and the changing scenes by altering the size of the projected castle and changing the position of the bridge.

In the cast there are three new faces. Rüdiger Bahr played the chief mocker, Biron. Gerhard Winter was the King of Navarra. Monica Blabtrau played Rosalind.

At first she was reminiscent of a charmingly angry Beatrice, but in the end, like the rest of the cast, she lost any hope she may have had of receiving an accolade on the long road into deep mediocrity.

Public reaction showed clearly that this play may spend its future existence collecting dust on neglected bookshelves.

(STUTTGARTER ZEITUNG,
13 November 1969)

THINGS SEEN

New methods of teaching art

OSKAR HOLWECK'S APPROACH

Art Schools in the Federal Republic have started a new form of artistic work but also artistic protest.

Art students speak of the lack of connection between aesthetic and social practice. Pupils accuse their teachers of educating them for a reality that has no application for them. Most professors do not know what they should teach and most students do not know what they want to learn. Total subjectivity is the only thing remaining and this is partly an inheritance of the fifties and informality.

One thing is missing from this analysis. The basic course is dismissed as "the time for drawing nudes". This spotlights the present condition of art schools. Earlier on, during the Bauhaus era, the basic course was the central part of the whole of a pupil's education. Because of its lack today students are left practically with no possibility of expressing themselves. As British artists Allen Jones and Peter Philips remarked after a period as temporary lecturers in Hamburg, "They simply do not get what they want."

But is it possible today to have a basic course tailor-made to our times? The first answer came via the exhibition entitled "Sehen" (Seeing) that Eva Tom Moehlen organised for the Cologne School of Adult Education at the beginning of 1967. On show were Oskar Holweck's basic teaching methods at the Art School in Saarbrücken. Holweck him-

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It was only when the exhibition moved on to Zurich that it was simplified by appropriate literature, "SEHEN - Basic teaching methods of Oskar Holweck. Documentation no 270 of the Museum of Arts and Crafts of the City of Zurich, 1968".

But even here few other people than experts were able to find their way around. The most important aspects became clear only after a visit to the Art School and a conversation with Holweck in the modest but where he teaches. Holweck does not teach in the normal sense of the word that presupposes a preconceived view of the world. He does not take art as his starting point but seeing and the analysis of everything that the eye can perceive.

This means that Holweck entirely disregards himself as an artist. His method and system is logical and objective, more scientific than artistic. As our various senses function simultaneously Holweck believes that the totality of our impressions of our environment is chaotic.



A senior class working with Professor Holweck

(Photo: Knauf)

He wants to restrict the chaos until it can be analysed.

What does this in fact mean? The student is gradually taught to see. First of all comes brightness, then matter and space, substance and structure, colour and expanse of colour. Then follows point, line and area.

Let us first consider brightness to which Holweck too gives precedence. He says, "In my opinion it is the most important study of nature with which a creative person must concern himself." He begins his teaching series with the construction of plastic models, most of them made of paper. They are intended to exhibit brightness and to be observed so that their correlation to space can be perceived. Other factors like form colour and material are excluded at first. Analysis and construction are here almost identical.

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CHRIST UND WELT

produced in the rectangular cells. This means in principle an infinite number of degrees of brightness. The students' sensitivity is this tested before he ever starts to depict shades, gradations and patterns on canvas. In a certain sense this is the realisation of what Yves Klein understood by the School of Sensitivity.

Looking at Holweck's method in action one aspect is particularly striking - his specialised mathematical talents. It is this that makes his system efficient and capable of including all the basic visual phenomena of the visual world. This goes a decisive stage further than researches at the Bauhaus.

As has already been said, Holweck's starting point is purely mathematical, a permutation one-figure to five-figure numbers. Transferred to the visual sphere this means a large, though limited, number of possible combinations of five different shades, colours, shapes and images.

Completion is the aim. These experiments supplement each other and from a series for the first time experience with computers has been included in the basic teaching method. This is converted into training students to proceed rationally with the variations of a formal problem.

"Herr Holweck," we asked a little coldly, "Where does the irrational come into this?"

He gave a firm reply. "The irrational cannot be taught," he said. "Everybody must come to terms with it on their own. We can only give the student the tool that he can use if he wishes."

We then looked over to a pile of his own works, a long structure scratched on paper. Here the irrational has conquered the rational. It can scarce be defined but the work has unmistakable poetic energy. But it is missing in the teaching method. Must that be so? Could not Holweck the artist inspire his students? He dismisses them with a comprehensive technical repertoire, a trained visual sensitivity and intelligence but with no content.

This is the very factor that makes his method provocative, provoking individual creativity. The experience the young artist gains from coming to practical terms with the rules of art in these two semesters gives him the stimulus to creativity. Holweck is particularly interested in discrepancies. "These negligible discrepancies," he said, "these so-called approximate values are of decisive importance. They gave life to our results."

It would be nice to end on a happy note. Oskar Holweck's teaching has become well-known - and so has the school. Unfortunately the school is state-owned and art is not a subject that local politicians can easily work themselves up about. Way back in 1961 the Art School was more than half closed. That was the reason why Professor Otto Steinert who had made a name for the school took his photography class to Essen. In the meantime there have been proposals to close the school entirely. Now the classroom remains are to be merged with an engineering school!

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(CHRIST UND WELT, 14 November 1969)

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Systems 69, an international symposium on questions of the future, is being held in Munich, attended by 1,200 economists, technologists and administrators. It is the first attempt to clear away the confusion from this threatening prospect and examine seriously its actual significance in the spectrum of all the technological sciences.

This is the beginning of a road that is to be marked by a congress of this sort every two years. The end is perhaps a practical world system.

At first efforts are being made to show the system of the smallest parts. A colony, a branch of production or a technical development is no longer a thing apart. This conviction is slowly beginning to make ground in the face of the widespread scepticism that research into the future still seems to encounter.

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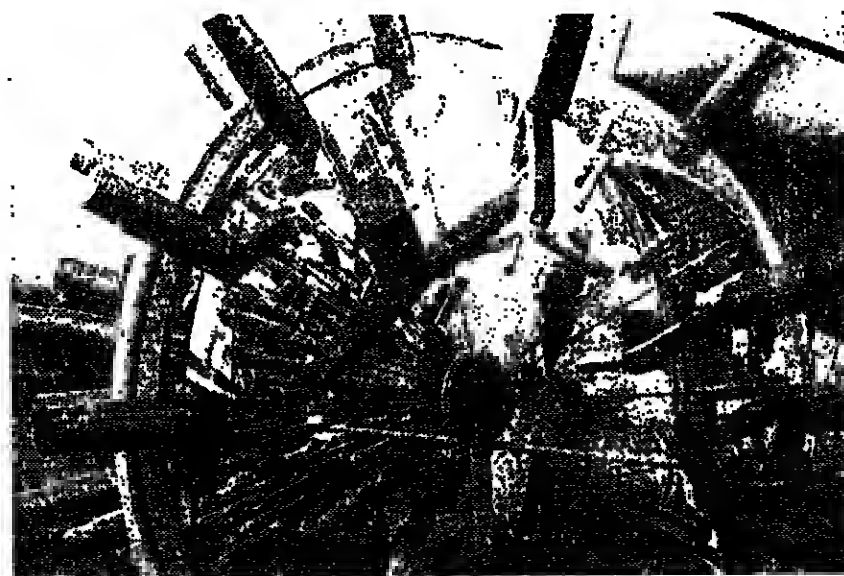
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For all that though moral values find their expression in the intentions of the organisers. They want to understand the development, make a system obvious and as controllable as possible, prevent trends towards catastrophe in good time and find ways out of a dead-end. That has nothing to do with the bedevilment of technology. It tries instead to save progress from its own strength.

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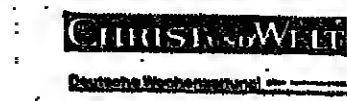
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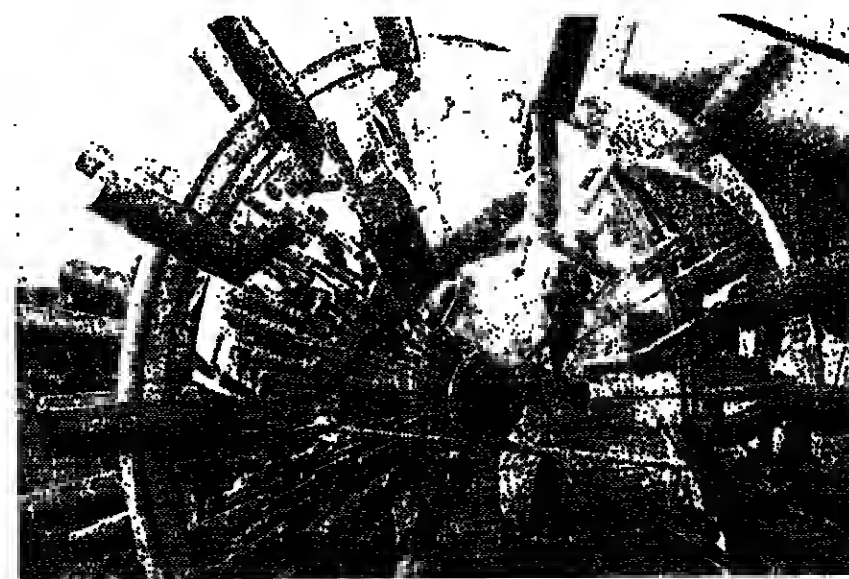
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West must increase its aid tenfold if catastrophes of normal proportions are to be avoided.

Dennis Gabor believes that traditional engineering procedure stands in the way of an ideal technology. The armament race will never contribute to victory in the struggle for the reason of the world. Engineers are not exculpated because they act on orders.

A change of consciousness in indeed at work. In the Soviet Union this is shown by the confession of physicist Andrei Sakharov. In the United States this development has reached its end in the past few weeks. Scientists at the Massachusetts Institute of Technology decided by 450 votes to only twelve against to run down the Lincoln Laboratory and devote their time to research for peaceful purposes instead of research into armaments. But these are symptoms, not general facts. "The great powers are no longer doing it, but smaller powers will continue."

In the course of the next ten years, Professor Gabor continued the number of scientists and technicians in the world will double. An engineering proletariat, wanting only to be earn a living, will accept any job of work as long as it is interesting and well-paid. But the whole of peacetime industry has no project so interesting as that of the Polaris submarine. Even moon rockets are of no help here as they fulfil nothing more than prestige purposes.

"Shall we invent the future?" said the grey-haired professor from Britain to the leading authorities from the Federal Republic. But he is unable to conceal his own doubts. Without pathos he resigned himself to the fact that it will be more difficult to bring civilisation to a new state in its development than to set off the atom bomb.

(Köln Stadt-Anzeiger, 14 November 1969)

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THINGS SEEN

New methods of teaching art

OSKAR HOLWECK'S APPROACH

Art Schools in the Federal Republic have started a new term of artistic work but also artistic protest.

Art students speak of the lack of connection between aesthetic and social practice. Pupils accuse their teachers of educating them for a reality that has no application for them. Most professors do not know what they should teach and most students do not know what they want to learn. Total subjectivity is the only thing remaining and this is partly an inheritance of the fifties and informality.

One thing is missing from this analysis. The basic course is dismissed as "the time for drawing nudes". This spotlights the present condition of art schools. Earlier on, during the Bauhaus era, the basic course was the central part of the whole of a pupil's education. Because of its lack today students are left practically with no possibility of expressing themselves. As British artists Allen Jones and Peter Phillips remarked after a period as temporary lecturers in Hamburg, "They simply do not get what they want."

But is it possible today to have a basic course tailor-made to our times? The first answer came via the exhibition entitled "Sehen" (Seeing) that Eva tom Moehlen organised for the Cologne School of Adult Education at the beginning of 1967. On show were Oskar Holweck's basic teaching methods at the Art School in Saarbrücken. Holweck him-

self is well-known as a sensitive and independent artist of the expanded ZERO circle. But on the other hand his reputation as a teacher is mainly limited to the Saar.

The exhibition offered a series of fascinating visual experiences, drawings, sculptures and paintings. But as there was no catalogue or notices on the walls it was difficult to follow his teaching method.

It was only when the exhibition moved on to Zurich that it was amplified by appropriate literature, "SEHEN - Basic teaching methods of Oskar Holweck. Documentation no 270 of the Museum of Arts and Crafts of the City of Zurich, 1968".

But even here few other people than experts were able to find their way around. The most important aspects became clear only after a visit to the Art School and a conversation with Holweck in the modest but where he teaches. Holweck does not teach in the normal sense of the word that presupposes a preconceived view of the world. He does not take art as his starting point but seeing and the analysis of everything that the eye can perceive.

This means that Holweck entirely disregards himself as an artist. His method and system is logical and objective, more scientific than artistic. As our various senses function simultaneously Holweck believes that the totality of our impressions of our environment is chaotic.



A seminar class working with Professor Holweck

(Photo: Kunkel)

He wants to restrict the chaos until it can be analysed.

What does this in fact mean? The student is gradually taught to see. First of all comes brightness, then matter and space, substance and structure, colour and expanse of colour. Then follows point, line and area.

Let us first consider brightness to which Holweck too gives precedence. He says, "In my opinion it is the most important study of nature with which a creative person must concern himself." He begins his teaching series with the construction of plastic models, most of them made of paper. They are intended to exhibit brightness and to be observed so that their correlation to space can be perceived. Other factors like form colour and material are excluded at first. Analysis and construction are here almost identical.

In his method Holweck distinguishes between three ways to show brightness. "Brightness on level produced by lifting the level surface in various positions; brightness in hollow spaces created with the help of perspectives; brightness formed with the aid material qualities, transparency for example."

The scientific aspect becomes evident here. Holweck links physical laws with artistic results. The law of the decrease in the intensity of light on a surface as the square of the distance of the source of the light is explained for example. This gives an exact formula for the dependence of brightness on perspective.

Holweck showed a model that he calls a brightness organ and that makes this dependence immediately clear. Sliding vertical rods are fixed in rectangular boxes. By pulling out the fasteners to various distances, different depths are

Completion is the aim. These experiments supplement each other and form a series. For the first time experience with computers has been included in the basic teaching method. This is converted into training students to proceed rationally with the variations of a formal problem.

"Herr Holweck," we asked a little coldly, "Where does the irrational come into this?"

He gave a firm reply. "The irrational cannot be taught," he said. "Everybody must come to terms with it on their own. We can only give the student the tool that he can use if he wishes."

We then looked over to a pile of his own works, a long structure scratched together. Here the irrational has conquered the rational. It can scarce be defined but the work has unmistakable poetic energy. But it is missing in the teaching method. Must that be so? Could not Holweck the artist inspire his students? He dismisses them with a comprehensive technical repertoire, a trained visual sensitivity and intelligence - but with no content.

This is the very factor that makes his method provocative, provoking individual creativity. The experience the young artist gains from coming to practical terms with the rules of art in these two semesters gives him the stimulus to creativity. Holweck is particularly interested in discrepancies. "These negligible discrepancies," he said, "these so-called approximate values are of decisive importance. They give life to our results."

It would be nice to end on a hopeful note. Oskar Holweck's teaching has become well-known - and so has the school. Unfortunately the school is state-owned and art is not a subject that local politicians can easily work themselves up about. Way back in 1961 the Art School was more than half closed. That was the reason why Professor Otto Steinert who had made a name for the school took his photography class to Essen. In the meantime there have been proposals to close the school entirely. Now the classes remaining are to be merged with an engineering school!

It is no longer possible today to give art teachers full training at the Art School. Those who begin with Holweck must continue their studies outside the Saar. Many commercial artists, textile designers, interior architects and independent artists also do this. The basic class itself suffers from the lack of class for optical physics and a photography department. And every year there is less money. This means that work with modern synthetic materials is out of the question.

As an art teacher Oskar Holweck is no less important than Itten, Albers and Moholy-Nagy were. Many of his former pupils have made a name for themselves. Others teach at universities. Holweck too has received offers of posts but he has never taken them up. Perhaps with the situation as it is about time he did.

CHRIST UND WELT, 14 November 1969

FUTUROLOGY

Human beings unsuited for ant-like life

Many conferences concerned with the future have discussed the eventual catastrophe of unthinkably proportions that is in store for humanity.

Systems 69, an international symposium on questions of the future, is being held in Munich, attended by 1,200 economists, technologists and administrators. It is the first attempt to clear away the confusion from this threatening prospect and examine seriously its actual significance in the spectrum of all the technological sciences.

This is the beginning of a road that is to be marked by a congress of this sort every two years. The end is perhaps a practical world system.

At first efforts are being made to show the system of the smallest parts. A history, a branch of production or a technical development is no longer a thing apart. This conviction is slowly beginning to make ground in the face of the widespread scepticism that research into the future still seems to encounter.

"Inevitable decisions must be made every day in the technological sphere," says Professor Karl Steinbruch well-known as the author of *The Informed Society and Falsely Programmed*. Atomic war is only one example. Another is the development of electronic intelligence and computer technology to give its possessor an enormous superiority that cannot be made up. A further example is the alteration of human hereditary characteristics.

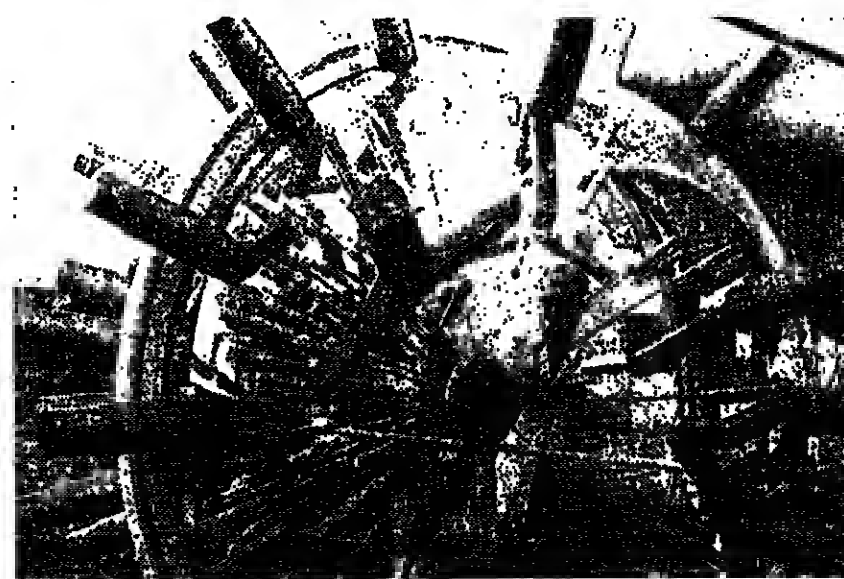
Systems 69 was a brainwave of Karl Steinbruch and he made all the preparations in conjunction with Robert Jung's Association for Questions of the Future. The Federal Ministry of Research was an ally of his in his effort to harmonise nature and environment in the service of Man with Man's humane system. Leading authorities were told, "Even the peaceful continuation of technical progress has a lot of disruptive force."

So Systems 69 deals roughly with all aspects of modern technology, research planning, nutritional reserves, energy sources, town planning, transport and expansion of the chemical industry. Exact formulae are not given but the visitor gains some impression of how development is to continue.

Officially there is no discussion on whether a political way should be sought to prevent dangers once they were recognised. Angry students were not satisfied with the answer that a rational system would be sought here but moral values were not definable and wrote theses containing aggressive proposals.

For all that though moral values find their expression in the intentions of the organisers. They want to understand the development, make a system obvious and as controllable as possible, prevent trends towards catastrophe in good time and find ways out of a dead-end. That has nothing to do with the bedevilment of technology. It tries instead to save progress from its own strength.

Steinbruch believes that if progress is saved it will have to thank mainly an educational system understood in modern terms. Steinbruch assigns teachers an incomparable function as cultural leaders. They are the instruments of decisive change. Teacher training is still orientated mainly to historical and philological



The 'porcupine' spectrometer for analysing crystals and thus the atomic structure of matter, exhibited at the 'Systems 69' congress in Munich

(Photo: dpa)

patterns of thought and action must however be shifted plainly in favour of the scientific subjects.

The difficulty of reforming the educational system without the time to test new proposals is recognised. But as long as the Saarbrücken skeleton agreements of state educational ministers with its shelving of the sciences and antitechnological motivation is valid losses totalling thousands of millions of Marks are to be expected.

Steinbruch commented bitterly, "This continues because nobody takes the trouble of looking at the losses in Marks and millions". And he continued sarcastically, "Perhaps we shall no longer need so many engineers in ten or twenty years time because by then we will no longer be in any position to catch up."

If progress is to be saved then Steinbruch recommends the clarification of all yardsticks for technical action. Today technology is so far advanced that all goals that do not contravene physical and logical laws can be realised. The question is: Is this desirable? What is wanted? And what is not wanted?

Professor Dennis Gabor from Britain forecast the danger that life would not continue when Earth's population figures increased to ten or twelve thousand million. Man's nature would not allow him to conform to this ant-like existence. And this state of affairs can be reached not long after the turn of the millennium.

Gabor says that homo sapiens and technology were born at the same time. But in some hundred thousand years technology has advanced from the club to the computer and has climbed up to the heights of the human brain.

The professor is pessimistic. Knowledge is available in the laboratory but it is not used. To help the world means to help developing countries, admittedly to a far greater extent than previously. The

West must increase its aid tenfold if catastrophes of normal proportions are to be avoided.

Dennis Gabor believes that traditional engineering procedure stands in the way of an ideal technology. The armament race will never contribute to victory in the struggle for the reason of the world. Engineers are not exculpated because they act on orders.

A change of consciousness is indeed at work. In the Soviet Union this is shown by the confession of physicist Andrei Sakharov. In the United States this development has reached its end in the past few weeks. Scientists at the Massachusetts Institute of Technology decided by 450 votes to only twelve against to run down the Lincoln Laboratory and devote their time to research for peaceful purposes instead of research into armaments. But these are symptoms, not general facts. "The great powers are no longer doing it, but smaller powers will continue."

In the course of the next ten years, Professor Gabor continued the number of scientists and technicians in the world will double. An engineering proletariat, wanting only to be earn a living, will accept any job of work as long as it is interesting and well-paid. But the whole of peacetime industry has no project so interesting as that of the Polaris submarine. Even moon rockets are of no help here as they fulfil nothing more than prestige purposes.

"Shall we invent the future?" said the grey-haired professor from Britain to the leading authorities from the Federal Republic. But he is unable to conceal his own doubts. Without pathos he resigned himself to the fact that it will be more difficult to bring civilisation to a new state in its development than to set off the atom bomb.

(Köln Stadt-Anzeiger, 14 November 1969)

Transplants of the future

work just published, *Medicine in the Year 1990 - a Technological Preview*.

Surgery used in organ transplants will be refined so much in the next twenty years that the human body will no longer use its defence mechanism to reject foreign organs.

Special animals will be bred to produce all the human organ replacements needed and, be injected with animal tissue to immunise the body against the rejection mechanism.

There are other fantastic developments. The common cold will disappear completely through the use of injections. Seventy per cent of all cancer cases will be controllable. And damaged oesophagus will be replaced by fine metal threads.

(Hannoversche Allgemeine, 13 November 1969)

Remote-control taxis supercede cars in towns

Traffic experts at the Futurologists' Congress in Munich proposed new methods to alleviate chaotic traffic conditions in city centres.

Taxis or buses driven by computers and running on rails could for the most part banish private cars from the centre of cities.

Professor Werner Holste, a director of Volkswagen and Dr Busch of Messerschmidt-Bölkow-Blohm, however do not consider that the automobile era is over. People have become so accustomed to this individual method of transport that only improved comfort and faster schedules in public transport would stop them using their cars. Leisure activities will increase and it is here that the car will continue to play a leading role, even if technically essential improvements are probable.

Drivers today have too many demands made upon them in everyday city traffic. In future his burden will be eased by electronics. The flow of traffic on cross-country arterial roads will be speeded up with the help of electronic guiding and driving elements. Guide cables in the road surface will transmit information and impulses so that a computer will be able to work out the best speed and other considerations.

Rail traffic, indispensable for longer journeys, will, experts believe, undergo a technical revolution by the year 2000. Steel rails will be replaced more and more by other methods, for example by trains moving on an air cushion or on a magnetic field, though these are at the moment technically problematic and uneconomical. And as the magnetic field would have to be strong unpleasant effects on the environment are expected.

Engineers are also considering a tube system to carry passengers. The train's own motive power will produce an air cushion around the passenger cabins.

Pick-a-back systems represent a link between individual and mass transport. (Today container traffic is already operating.) But economic benefits are limited by the fact that passengers' cars must also be carried.

In future container traffic of bulk goods will be able to travel on water as barges pushed or pulled along by ships. The containers could then be attached to trains or lorries or loaded quickly into freighters.

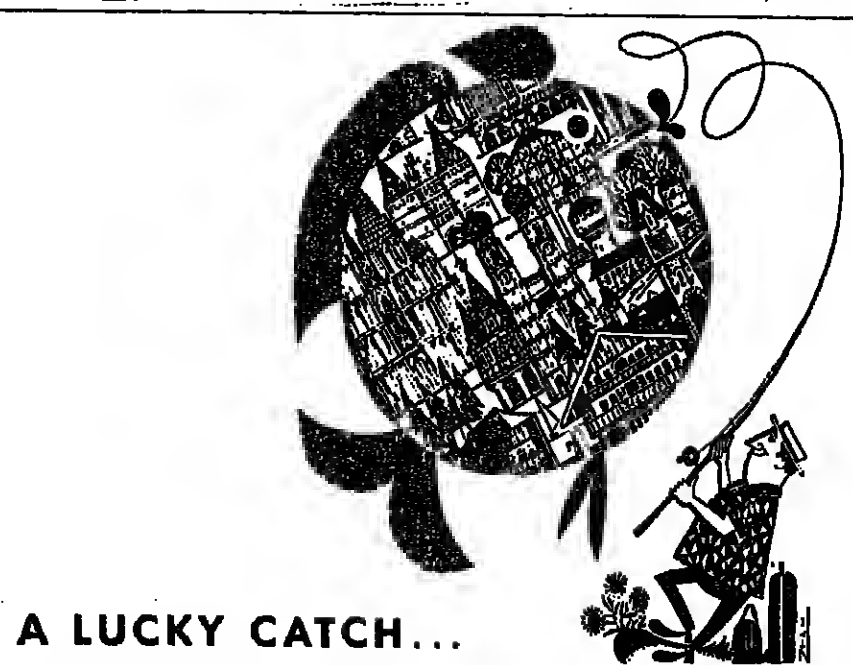
Pipelines are used today to carry only liquids or gases. But they will be of use in carrying solid loads. Insoluble raw materials could be broken up in a supporting liquid and flushed through the pipeline or else forced through in sacks. One precondition for this is that the two substances do not affect each other.

Future air transport will be determined by the use of larger and faster aircraft. Experts believe that by 1985 aircraft will be able to carry a thousand passengers on intercontinental routes. If growth rates are constant air transport will have increased tenfold by 1990 and will be 34 times as high in the year 2000.

Large aircraft are making air transport more and more economical. In the foreseeable future costs per passenger-mile will be roughly that of the first class on the railways.

One single supersonic aircraft - acroplanes of this type should be available for service towards the end of the century - will, because of its greater speed, be able to carry the same number of passengers as 24 slower Boeing 707s today or nine Boeing 747 Jumbo Jets that are being put into service at the end of this year or the beginning of the next.

(DIE WELT, 14 November 1969)



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FINANCIAL AFFAIRS

Bundesbank President's strength depends on his personality



Karl Klasen

Karl Klasen knows the highly charged situations he can get into as President of the Bundesbank in his dealings with politicians.

When his party colleague Karl Schiller first mentioned his name in connection with the post that Karl Blessing would soon be vacating, Klasen was shrewd enough to impose one condition.

He said: "I am only prepared to accept this offer if both parties, the SPD and the CDU as well, give me an overwhelming vote of confidence."

At the time Klasen rejected the offer since he considered that this requirement had not been fulfilled. He did not want to leave himself open to suspicion of grabbing the President's chair with the help of party backing.

Now, with the situation on the party front being superfluous, the spokesman of the Bundesbank no longer needs to

burg, in that he made Otmir Emminger, the only opposition candidate of the CDU, Vice-president of the Bundesbank.

Thus Klasen worked for a personal-political combination, which had begun in 1958, when the Blessing era commenced. Blessing, a former member of the board of the old Reichsbank and head of the Federal Republic Underver group, was closely connected with the CDU, whereas his second-in-command, Heinrich Troeger, the former Finance Minister of Hesse, was a member of the SPD.

All that will happen on 1 January when Blessing and Troeger go into retirement and cede their positions to the new men is that the "party" which held the top position in the Bundesbank will take over the second rank, and vice versa.

The Bundesbank will not be made into a *chambre politique*.

Karl Schiller, whose job it was as Economic Affairs Minister to find the new President, has thus cast the dice for the next eight years.

The two new men will be recommended to the President of the Federal Republic, Gustav Heinemann, to take up eight year terms. The other seven members of the governing board will be elected for a similar length of service.

Only in this way can a government take a direct, personal control over the fate of the most senior Federal Republic currency organization.

Bundesbank legislation of 26 July 1957 makes this country's Bank of Issue one of the most independent in the whole world.

Now Karl Klasen will be "spokesman" on the central bank committee of the Bundesbank for a term of eight years.

On every other Thursday, he, or his deputy will preside over a group of twenty men, who will be the most senior decision-makers of the Bundesbank and will negotiate problems of currency and credit policy, this having a large say in the course of this country's economy.

The President's work is governed by legislation stating: "The Bundesbank's duty is to fulfill at all times its task of supporting the economy of the Federal Republic. In the exercise of its duties it is independent of government directives." (§ 12 Bundesbank Act.)

The definition of the duty to be fulfilled is contained in § 3 of the Act, which says: "The Bundesbank shall control with the aid of the powers entrusted to it the circulation of money and credit provisions with the aim of protecting the Mark."

In other words, if the central government should steer an inflationary course and seem to be putting the Mark in jeopardy the Bundesbank can steer a collision course, which they had to do under Blessing and his predecessor Wilhelm Voeke on several occasions.

The moot point is where the danger really sets in for the currency. Should the red light be shown at one per cent, two per cent or three per cent price increases annually?

If he wants to exercise control over the choice of the "right" answer the Minister of Economic Affairs must see that the Bundesbank chief's are the "right" men.

But this only affects nine out of twenty. And to get them in the Minister must work in conjunction with the central bank committee in order to ensure that the people he recommends have the right professional qualities.

The central government still has no

influence on the election of the other eleven members of the central bank committee; Bonn has no say in the nomination of the Presidents of the Federal state central banks, which act as branches of the Bundesbank in the eleven states and in Berlin.

These Presidents are nominated at the suggestion of the Upper House, in fact at the recommendation of the Federal states, by the President of the Federal Republic, Gustav Heinemann.

Once the central bank committee is complete all that the government can do is send the Finance and Economic Affairs Ministers to any meeting they wish. But the Ministers have no vote.

Although shortly after it came into existence the Bundesbank was under the aegis of the Allies it has always been fairly autonomous in its choice of leaders.

In the days of iron-hard Wilhelm Voeke the central bank committee of the Bank deutscher Länder elected its own President and had autonomy in the choice of the nominee for the other positions on the board. During the whole period after the end of the Reichsbank the most senior monetary officials in this country were independent.

The directorate of the Reichsbank from 1933 onwards was nominated and elected by Adolf Hitler who used it as a perverted governmental tool.

The autonomous system of this arrangement caused Konrad Adenauer, Ludwig Erhard, Kurt Georg Kiesinger and Karl Schiller a certain amount of difficulty at times.

This so-called grandiose independence was and is a challenge for politicians. First of all it caused trouble for Konrad Adenauer in whose era the almost complete autonomy of the Bundesbank was carved out. Later on Franz Josef Strauss dreamt of a super-ministry, of a Treasury on British lines in which the Economic Affairs and Finance ministries would be



Otmir Emminger

united and would keep a tighter rein on the Bundesbank.

Similar motivations have been ascribed to Karl Schiller who would also like to have stronger influence over the Bundesbank. But he can no longer be reproached with this, and even if he tried to lessen the autonomy of the Bundesbank by changing the law he would be doomed to failure in advance. The Bundesbank would be up in arms. Solutions such as the British system have no chance in a Federal Republic which has its mind on stability. The Federal government must make greater efforts to agree with the main Frankfurt. Karl Schiller has a life-line with the Bundesbank now that Karl Klasen is its president. But the new president, who is still holding his position as chairman of the Deutsche Bank will be led by the best considerations of the Bank of Issue just as much as his predecessor was.

In addition in his role as president Karl Klasen is only one among twenty men with equal rights and equal power and only in the case of a divided vote has he any deciding power with his casting vote. Just how strong the president of the Bundesbank is remains a question of his personality and not of the system.

Ludwig Meyer
(DIE ZEIT, 21 November 1969)
(Photo: GZ)

The new man in Karl Blessing's shoes

Süddeutsche Zeitung
MÜNCHEN NEUESTE NACHRICHTEN

decision has been taken for practical reasons and not just to follow the party line. For a time it seemed as though the latter cause of action would prevail but this gave rise to such vehement criticism that the Cabinet thought better of it.

Dr Klasen was previously the president of the Landeszentralbank in Hamburg, which gave him contacts with the Bundesbank, but then went back to the Deutsche Bank. He is the kind of man who can be relied upon to take a stand against the government if ever it should make controversial suggestions to him.

Emminger has won for himself a high international reputation. This promises to be a good team, and together the two new men should spare us any of the problems previously overshadowing currency policy.

The central bank committee will ensure continuity of Bundesbank policy. This is the board composed of presidents of central banks in each of the Federal states where decisive measures are formulated. It is always comforting to remember this whenever there is a change of personnel in the top positions of the Bundesbank. There are certainly no grounds for disquiet.

The reason why it has taken so long to come to this decision is that former Federal Chancellor Kurt Georg Kiesinger wanted to see his man, Emminger, in the top position. The fact that the present government has stuck with Schiller's recommendation goes to show that their

(Süddeutsche Zeitung, 21 November 1969)

CAR INDUSTRY

BMW - the smallest but still with a powerful arm

MORE THAN 2,000 MILLION MARKS' TURNOVER BY 1970



BMW sales manager Paul G. Hahnemann, 57, proudly claimed, "Now we are the smallest" as Volkswagen merged with NSU and Auto Union to become Audi-NSU-Auto Union.

Hahnemann will go out of his way to impress on the Federal Republic motorist that the new company is small but still good.

Small but good in Hahnemann's parlance means that BMW will be following the company policy that he has advocated since 1961 and for the next five years will be the largest producer of private cars on this country's automobile market and in so doing will remain as autonomous as possible.

This exclusive sales policy is due to Hahnemann's skill at finding niches on the market. Market strategists in Milbertshausen where the firm was located in 1961 asked their brains to find a new sales policy and came to the conclusion that they must cater for certain minority sections of the motoring public whose needs could not be fulfilled so easily by the larger mass-producers.

Summing up

Paul Hahnemann summed up the policy with the slogan, "A new class of vehicle for a new class of client". The vehicles were to be sporty and aggressive in their manufacture with snob appeal in their design. The outcome of this was favourable for BMW who could reckon on commanding relatively high prices. The policy of finding gaps in the market was an immediate success and Paul Hahnemann earned himself the nickname "Niche Paul".

The nickname originates from Franz Josef Strauss who has proved to be a useful interpreter of BMW affairs. Although as Minister of Finance he could have had at least a six cylinder limousine from the firm's rivals, Daimler-Benz, the Bavarian CSU Minister cruised around Bonn in a production model BMW 2000 four-cylinder car.

Strauss has said that everybody must do something for home produced articles, after all.

The BMW 2000 is the successor to models 1600 and 1800. It is an essential part of the "New class" about which Hahnemann has been boasting. It has put the company on the up-and-up again.

Its appeal has been extended in both directions in modified versions. For the man with a small family there was the two-door aeris, 1600, 2002, and 2002 T. Six cylinder versions, the 2500 and 2800, have also been produced.

BMW produced cars with two different cylinder capacities which brought them great fame. The Bavarian company laid out their rather more compact version of the six-cylinders so that it was faster than the comparable Daimler types and costs less.

This was the first time that Hahnemann and his team had steered a collision course with Daimler-Benz.

The men from Munich now believe

that they can get away with this after years of holding back. In 1968 BMW produced almost as many petrol driven private cars as Daimler-Benz.

The Bavarian Motor Works (BMW) produced 123,286 vehicles. The Swabians, Daimler-Benz, manufactured 216,284 cars, but of these 74,498 were diesel powered. This means that Daimler-Benz are only 18,502 ahead in production of petrol driven cars.

Added to this BMW has in the meantime freed itself almost completely of the worry that it would one day become a part of the powerful Daimler-Benz concern.

This attitude of the company towards Daimler-Benz harks back to the events of 1960 when main Daimler shareholders wanted to swallow up the bruised and battered BMW firm and wind up the trade name BMW.

At the time it was only the action of the late lawyer Mathern who stepped in on behalf of small shareholders in Daimler-Benz and by a trick of legal procedure spiked the guns of large Daimler shareholders' concerted action.

What he left behind was a pile of debris. The only thing that remained of the once famous concern whose main production line for private cars were in Eisenach, Thuringia (now in the GDR), was a mountain of debts and sentimental memories.

These memories were not without value because they did mean that the company had an almost indestructible image. BMW's pre-war cars such as the 327 were still clear in many people's memory.

Neither the Isotta which was cursed because the wheel with mode it the ideal instrument for finding pot-holes, nor the BMW 501, were able to tarnish the image of the BMW name. At the time it was said that all BMW needed was new management, a new policy and a great deal of money. The Bavarian government provided the money in the form of deficit guarantees and the Quandt industrial group provided capital. Quandt brothers

brought with them a new management including the former Opel dealer from Friburg, Paul G. Hahnemann. In 1957 he had re-floated ailing Auto Union of Düsseldorf. When Daimler-Benz took over Auto Union they did not keep the promise of their large shareholder to make Hahnemann head of Auto Union, which endangered in him a resentment of Daimler-Benz.

"Niche Paul" who has an annual income of about 400,000 Marks, also swept



BMW's 2800 CS

(Photo: BMW)

away the cobwebs from BMW. But once again this sales genius had the Daimler sword of Damocles hanging over his head as he steered a collision course with them. BMW shareholder Quandt who now has an absolute majority on the BMW board at the same time owns fourteen per cent of Daimler-Benz. For a long time it was thought that Flick, the large-scale shareholder of Daimler, and build a Daimler-BMW concern.

Rumour had it that Quandt's basic scheme is to push up the price of BMW as high as possible and then sell at the most opportune moment. Many people see this moment as being the early seventies.

Herbert Quandt has thus planned his

personal policy over a long time. Hahnemann, who is in his late fifties, was given the position of acting chairman of the board. But the new head of BMW who will take over on 1 January 1970 as successor to Wilcke is 42-year-old Eberhard von Klenheim.

This is not to say that Quandt will necessarily sell out to Daimler. For another part of the Quandt concern is the Varta battery company. But the largest is Volkswagen which has already taken over the Wankel firm, NSU, and has signed contracts with Porsche.

In Kurt Lotz's sales programme is every kind of car from the NSU Prinz to the Ro 80 and only one type of car is missing, the classy sporty kind. BMW produces such a car.

If Quandt were to sell out to Daimler the BMW programme would be endangered since it would overlap with Mercedes'. Furthermore for the sake of Varta it

would be better if Quandt did business with a firm producing two million cars rather than one producing 300,000.

And finally Volkswagen have put a lot of effort into experiments with battery-powered electric cars the development of which is of great interest to Varta.

In Paul G. Hahnemann opinion there is good time for everything. BMW have had great increases in turnover. In 1968 they exceeded 1,000 million Marks for the first time. In 1969 their turnover will be 1,500 million Marks and in 1970 2,000 million Marks.

Werner Meyer-Larsen
(DEUTSCHE ALLGEMEINE SONNTAGSBLATT, 23 November 1969)

BMW's price increases surprise no one

LEADING THE MARKET IN MORE WAYS THAN ONE
LEADING THE MARKET IN MORE WAYS THAN ONE

STUTTGARTER ZEITUNG

There is some doubt however - although not in the case of MBW and Daimler-Benz about the attitude of motorists who have covered their needs this year for the first time since the recession.

One of the main reasons for this may be that other Federal Republic factories have held back on their price policy, when they have taken into account that foreign competitors facing rising costs in their own countries have not been able to use the revaluation of the Mark to cut their prices and at best have only been able to maintain price stability.

This there remains only one consolation for the motorist and that only a slight consolation. Competition on the Federal Republic car market is as keen as ever and price adjustments will certainly not be made lightly.

The extent of price increases at MBW makes this only too clear.

(STUTTGARTER ZEITUNG, 18 November 1969)

de and are not so pushed by competitors as the small and medium car firms.

Although it seems paradoxical this may not be such a bad psychological moment for the price raises. There has been a wave of price increases on almost all commodities recently and it is propitious to jump in with new rates before people forget about other price jumps.

This is particularly so, since at this time of year when figures are published the motor manufacturers' profits make their complaints seem less credible.

There seems little doubt that Federal Republic motor manufacturers will publish excellent trade figures for 1969 on account of the recently published figures for production and turnover.

Both have a relatively exclusive client-

■ AVIATION

Vertical-take-off aircraft ready by 1978

COMMITTEE SET UP TO ANALYSE CIVIL AND MILITARY NEEDS

Years ago this country's aircraft industry reckoned it had found the philosopher's stone in the shape of the VTOL, a plane needing neither take-off nor landing runways.

Civil and military aviation interests were enthusiastic. Think how much money could be saved on long runways and what military advantages an aircraft capable of taking off like a helicopter but otherwise a normal forward-flight plane would have.

But the vertical take-off project was not without drawbacks. Its range is short and development costs high. When Bonn ran into financial troubles the project was shelved. It now looks as though the VTOL may be given a fresh chance.

Several years ago the industry launched a number of vertical take-off projects with considerable technological success but was forced to apply the financial brakes when Bonn's interest flagged. By then roughly 2,000 million Marks of the taxpayer's money had been invested in the new technology.

Of late this country's VTOL projects

Rust-resistant
oil tanks
available soon

Non-rusting oil tanks will be on the market soon. Bavaria's Technical Supervision Association (TUV), an organisation better known for carrying out compulsory two-year tests on motor vehicles, has tested prototype fibreglass-thoughened synthetic tanks on behalf of the chemical industry for the past five years.

Over this period, TUV recently stated, the tanks have shown not a trace of corrosion or other material changes.

Conventional metal tanks have the drawback that they tend to rust. Owners of oil-fired central heating have to fit their tanks with expensive protective devices and alarms because of the danger of oil seepage polluting the soil and underground water reserves.

Conventional tanks tested over the same period showed definite traces of rust after two years. The plastic variety, which have proved satisfactory in every respect, are expected to be approved by the Federal states shortly.

(DIE WELT, 21 November 1969)
(Hannoversche Presse, 17 November 1969)

Production of airbus
components begins

Aircraft manufacturers in this country have commenced construction of the first airbus components. The A 300 B European airbus will be flying by 1973. A twin-jet giant it will convey 250 passengers at a high subsonic speed of more than 560 miles an hour on short and medium-distance runs.

Following the British government's pullout only the Netherlands and Hawker-Siddeley of England are still participating in this Franco-Federal Republic project, which is intended to give the European aircraft industry a considerable boost.

General Electric's turbofan multistream CF 6, the most powerful aero engine in the world, is to power the

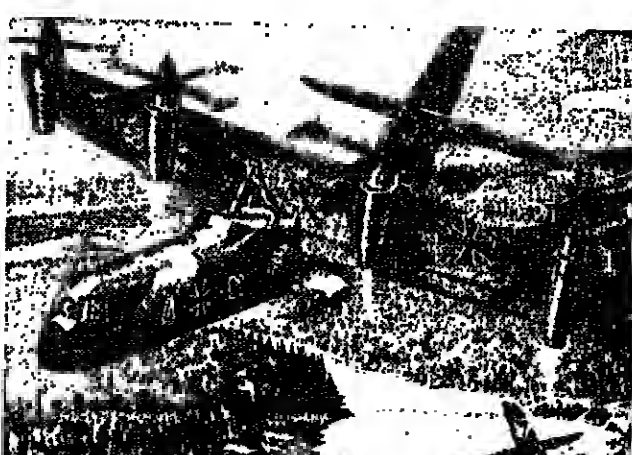
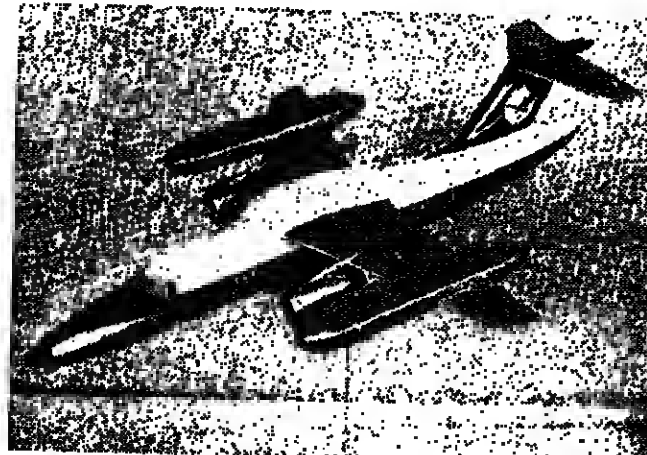
SONNTAGSBLATT

have benefited from the tailwind of a confidential order placed by Bonn.

The Defence Ministry and Economic Affairs Ministry stipulations are culled from the requirements of Luftwaffe and Luftansa for a vertical and short take-off transport plane suitable for both civil and military use and to be ready for practical use by 1977 or 1978.

A committee of specialists commissioned by the two Ministries and chaired by ex-Heinkel designer Professor Karl Thälau is to evaluate the studies submitted.

In principle the aircraft visualised by Bonn is to carry eighty to 100 passengers



or eight to ten tons of freight and reach a top speed of over 400 miles an hour. Four entries have been submitted but it will not be possible to evaluate them before the end of the year.

Messerschmitt-Bölkow-Blohm of Munich, a consortium resulting from the merger of Messerschmitt, Bölkow and Hamburger Flugzeugbau, have submitted a project study for the Do 140, the most important design feature of which is a wing that can be swivelled round its longitudinal axis.

In their normal position the four propeller engines of this swing-wing machine propel it forwards; pointed upwards they can either provide lift for take-off or hover for vertical touch-down. The propellers of the four turbo-prop engines thus function both as normal propellers and as helicopter rotors.

ers or ten tons of payload and a cruising speed of 478 miles an hour.

The other two projects are based on entirely different technological principles. Hamburger Flugzeugbau, unlike its parent company, has equipped its projected model with jet engines, four for forward flight, four for lift. The Hamburgers have christened their HFB 600 the Vertibus.

It is claimed to have a take-off weight of 55.8 tons and a cruising speed of approximately 540 miles an hour. An interesting feature of the technical data supplied is that the Vertibus can climb to a height of 29,500 feet in six minutes flat.

The most thorough preliminary work in VTOL development has, it can be stated with some degree of certainty, been carried out by Dornier. Dornier's Do 31, the world's first vertical take-off jet, has been undergoing flight trials since the beginning of 1967.

Financed by the Ministry of Defence, the project was shelved because there was obviously some uncertainty as to the practical military uses to which the aircraft could be put.

Even so, Dornier design engineers can utilise experience gained on the Do 31 for the present design, the Do 231, which has been made considerably larger in order to conform to specifications.

Propulsion is by means of fourteen jets, two of which are used for forward flight, the remaining twelve for lift. With a take-off weight of 59 tons and a capacity of roughly 100 passengers the Do 231 is reckoned to have a range of 500 miles and a cruising speed of 560 miles an hour.

The likely price of each aircraft varies

according to the length of the run, in the case of the Messerschmitt-Bölkow project the unit price for a run of 100 is said to be thirty, for a run of 300 twenty million Marks.

Estimated on the same basis, quotations for the VFW project are 36 million, for the HFB project 25 million and for the Dornier project forty and 28 million Marks respectively.

The advantages of vertical take-off have been evident for a long time. In the military sector VTOLs can operate from the smallest airstrips and are consequently far less vulnerable than if they had to be based at major fields with long runways.

At the same time their technological complexity and the resulting costly servicing have proved a handicap in that they make decentralised use more difficult.

For civil use VTOLs will, as a result of the short time needed for ground transport, parking and check-in, have door-to-door travel times in building areas, it is felt. In view of their limited range VTOLs will probably mainly operate as air taxis between towns without airports and major international fields.

Two types of vertical take-off planes, the one on the left is a Do 231 Vjet with the jet engines close to the tail. On the right there is a model of a four-engined propeller-driven Messerschmitt-Bölkow-Blohm aircraft.

(Photos: Dornier)

Messerschmitt-Bölkow-Blohm GmbH

Before any of these projects leaves the drawing-board engine designers in particular will have to put in more work. The colossal noise and the uneconomic take-off engines have so far been considered obstacles that the military might conceivably but civil operators would on no account be prepared to countenance.

In recent years, though, engine design has made considerable progress, as aircraft manufacturers are quick to point out. As far as engines go they have no choice but to make use of foreign developments. Dornier, for instance, plan to use Rolls Royce engines, while Messerschmitt-Bölkow-Blohm group models will, it is envisaged, use General Electric engines.

Four different designs may be competing with one another but four models will not be built. Development costs to the tune of 2,000 million Marks make this out of the question.

Should Bonn agree on a design and agree to finance construction as well as design (the one does not necessarily follow from the other, as the example of the Do 31 shows) the project can still only be accomplished jointly. Even in their preliminary designs the firms have made it clear that they are also considering cooperation with manufacturers in other countries.

(DEUTSCHE ALLGEMEINE SONNTAGSBLATT, 23 November 1969)

TECHNOLOGY

Most hope pinned on fast breeder reactors

One of the most urgent tasks facing Education and Scientific Research Minister Hans Lausink is a decision on whether or not to give the go-ahead for the building of the two projected 300-megawatt prototype high-temperature and fast breeder power reactors. The following article reviews the present state of developments on advanced reactors.

In addition to successful endeavours to produce atomic energy for the immediate generation of electric power in what might be termed conventional nuclear power stations considerable interest in the reactors of the future is being shown in this country.

The reactors in question are types that are expected both in this country and elsewhere to generate current even more cheaply than of these days and to make better use of their nuclear fuel in the process.

As in many other countries the most interesting prospect is felt to be the fast breeder reactor, which generates more fuel material than it consumes. It is also said to make particularly economic use of plutonium, which is a by-product of all nuclear power in operation and will continue to accumulate as the reactor-building programme gets under way.

In this country Karlsruhe nuclear research centre is the main centre of fast breeder research. A special feature of developments here is that industry was joined at a very early stage. Reactor development, it was felt, makes economic sense only when it is not only technologically successful but also leads on to a

product that can be sold to the customer.

Industry, which both manufacturer and markets the finished product, is expected to see that these factors are taken into account at an early state and also influence developments by stating in its opinion what prospects one type or another has. This principle has undoubtedly proved its worth for reactors already in use in this country.

Until the beginning of this year development of two different types of fast breeder was running parallel in this country, but after steam-cooled breeder reactor development had been shelved in other countries, principally the United States, and technical difficulties arose that would have led to far higher costs and considerable delay in development the emphasis was shifted to sodium-cooled breeders.

It is interesting to note that the sodium breeder project is an international enterprise involving the governments of this country, the Netherlands, Belgium and Luxembourg and Interatom/Siemens, Belgolnuclear, Neraatom and Luxatom.

At the present stage of development plans for a 300-megawatt prototype sodium-cooled fast breeder reactor to be built near Weisweiler in the Saar and taken into service in about 1975 are being examined.

Development of this type of reactor is also benefiting from the twenty-megawatt experimental compact sodium-cooled nuclear power station under construction by Interatom at Karlsruhe nuclear research centre on behalf of the government atomic energy research agency. This compact reactor is to become operational next year.

Can the breathing of a top-flight athlete be investigated only under conditions of simulated physical strain — on the bicycle ergometer, for instance — or are there ways of measuring his breathing under conditions nearer to the real thing?

At Dargatz 69, an instruments fair in Hamburg, a new face mask was unveiled. It can, for instance, be worn by oarsmen during training. The amount of air they breathe in and out is converted into electric impulses and transmitted straight to a computerised measuring station.

The core of the device is a small electrical condenser shaped like the star-patterned mouthpiece used in decorating cakes with icing sugar or cream. At either end it has a disc of metal-steamed plastic with a hole in the middle and silica radiating from the hole leaving little triangles reminiscent of heart valves.

The discs are let into the airpipe of the face mask. The outer disc is stiff, the inner one flexible. When the guinea pig inhales the flaps of flexible foil move closer to the rigid disc, when he or she exhales the flexible flaps move away.

Attached to an electric circuit this arrangement works like a changeable condenser. The electrical impulses emitted indicate the amounts of air in- or exhaled. A finger-thick electronic unit screwed to the stripe transmits the impulses to the receiver and a computer converts them into volumes, after which they appear on a scale.

Another example of an up-to-the-

As in other countries specialists here expect the fast breeder to come into its own in large-scale commercial reactors at the beginning of the eighties.

Another reactor of the future that is undergoing intensive development in this country is the gas-cooled high temperature reactor. The prime mover in development work on this type of reactor is Jülich nuclear research centre, the second largest in the country.

This country has developed its own variant of the high-temperature reactor, the pebble-bed reactor, a fifteen-megawatt experimental prototype of which has been in operation at Jülich since 1966.

The reactor division of Brown Boveri and Krupp has submitted finished blueprints and offered to build a 300-megawatt prototype thorium high-temperature reactor. This reactor is to be built at Schmehausen, near Hamm, Westphalia, with the aid of high government subsidies for a group of public power utilities. The contract is shortly to be awarded.

The economic prospects of the high-temperature reactor would be particularly promising if the helium-cooled variety were to be directly coupled to a large helium gas turbine. Developments here are being followed with interest by Jülich, Brown Boveri/Krupp and Gutehoffnungshütte.

Work on this project too is aided by a small experimental reactor that is being built to the order of the Federal government and the state of Schleswig-Holstein at Geesthacht, near Hamburg. This 25-megawatt project is to consist of a high-temperature reactor with prismatic fuel elements and a gas turbine.

Close attention is being paid to growing international interest in gas-cooled fast breeders. In the nuclear research programme for 1968-1972 a concentration of effort on sodium breeders and high-temperature reactors appears meaningful but should the need arise the work in progress will provide a solid foundation for examination of gas breeder developments.

Gas cooling is also of interest in another special variety of reactor: the deuterium-moderated reactor. Its prospects are to be probed with the aid of a 100-megawatt power station being built by Siemens at Niederachbach, Bavaria.

Development work on light-water reactors — tried, trusted and a market success — is, of course, continuing. A large



The world's first pebble-bed reactor with spherical elements, built at the nuclear research station at Jülich. The station supplies North Rhine-Westphalia with power. (Photos: dpa)

number of improvements have already resulted in a higher degree of efficiency, better specific performance, improved load behaviour, greater safety and reliability.

One project is designed to examine whether a boiling-water reactor works more efficiently when overheated. Adjacent to Kahl experimental nuclear power station a special 25-megawatt overheating reactor known as the hot steam reactor has been built by AED-Telefunken and is on the point of being taken into service.

Another promising development is that of a compact mini-reactor for powering space satellites and other spacecraft. Following development work Interatom, Brown Boveri and Siemens have submitted plans for a terrestrial prototype, the in-core thermionic reactor, which is to be built at Jülich in 1971 and taken into service in 1974.

Nuclear power for merchant vessels is another promising sector in which this country undoubtedly leads Europe. The Otto Hahn, a 16,870-ton research freighter, was successfully taken into service earlier this year. Its pressurised-water reactor, built by Babcock & Wilcox in conjunction with Interatom, develops 11,000 horse power.

(Hannoversche Presse, 20 November 1969)

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DIE WELT

UNABHÄNGIGE TAGESZEITUNG FÜR DEUTSCHLAND

helium, washes out the absorbed vapour and takes it to the measuring section for analysis. As the vapours stick to the adsorbent for varying lengths of time the carrier gas mostly carries only one at a time.

If the adherence times are known the sequence times are known the sequence of measurements can be sufficient to identify the components. What arrives one minute after zero is one hydrocarbon compound; what arrives a minute later is another.

(DIE WELT, 21 November 1969)

